DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
3000 MARINE CORPS PENTAGON
WASHINGTON, D.C. 20350-3000

NAVMC 3500.33A
C 469
15 Feb 2011

NAVMC 3500.33A

From: Commandant of the Marine Corps
To: Distribution List

Subj: GROUND ORDNANCE MAINTENANCE TRAINING AND READINESS MANUAL, (SHORT TITLE: GROUND ORD MAINT T&R MANUAL)

Ref: (a) MCO P3500.72A
(b) MCO 1553.2B
(c) MCO 3400.3F
(d) MCO 3500.27B W/Erratum
(e) MCRP 3-0A
(f) MCRP 3-0B
(g) MCO 1553.2A

1. Purpose. Per reference (a), this T&R Manual establishes Core Capability Mission Essential Tasks (METs) for readiness reporting and required events for standardization training of Marines and Navy personnel in Occupational Field (OccFld) 21, Ground Ordnance Maintenance. Additionally, it provides tasking for formal schools preparing personnel for service in Marine Corps commands. This NAVMC supersedes NAVMC Directive 3500.33.

2. Scope

a. The Core Capability Mission Essential Task List (METL) in this manual is used in Defense Readiness Reporting System (DRRS) for the assessment and reporting of unit readiness. Units achieve training readiness for reporting in DRRS by gaining and sustaining proficiency in the training events in this manual at both collective (unit) and individual levels.

b. Per reference (b), commanders will conduct an internal assessment of the unit's ability to execute each MET, and develop long-, mid-, and short-range training plans to sustain proficiency in each MET. Training plans will incorporate these events to standardize training and provide objective assessment of progress toward attaining combat readiness. Commanders will keep records at the unit and individual levels to record training achievements, identify training gaps, and document objective assessments of readiness associated with training Marines. Commanders will use reference (c) to incorporate nuclear, biological, and chemical defense training into training plans and reference (d) to integrate operational risk management. References (e) and (f) provide amplifying information for effective planning and management of training within the unit.

c. Formal school and training detachment commanders will use references (a) and (g) to ensure programs of instruction meet skill training requirements established in this manual, and provide career-progression

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

training in the events designated for initial training in the formal school environment.

3. Information. CG, TECOM will update this T&R Manual as necessary to provide current and relevant training standards to commanders, and to ensure a current Core Capabilities METL is available for use in DRRS. All questions pertaining to the Marine Corps Ground T&R Program and Unit Training Management should be directed to: Commanding General, TECOM (Ground Training Division C 469), 1019 Elliot Road, Quantico, VA 22134.

4. Command. This Directive is applicable to the Marine Corps Total Force.

5. Certification. Reviewed and approved this date.

R. C. FOX
By direction

Distribution: PCN 10033197000

Copy to: 7000260 (2)
8145001 (1)

LOCATOR SHEET

Subj: GROUND ORDNANCE MAINTENANCE TRAINING AND READINESS MANUAL, (SHORT TITLE: GROUND ORD MAINT T&R MANUAL)

Location: _____
(Indicate location(s) of copy(ies) of this Manual.)

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporated Change

GROUND ORD MAINT T&R MANUAL

TABLE OF CONTENTS

GROUND ORD MAINT T&R MANUAL

CHAPTER 1

OVERVIEW

CHAPTER 1

OVERVIEW

1000. INTRODUCTION

1. The T&R Program is the Corps' primary tool for planning, conducting and evaluating training, and assessing training readiness. Subject matter experts (SMEs) from the operating forces developed core capability Mission Essential Task Lists (METLs) for ground communities derived from the Marine Corps Task List (MCTL). T&R Manuals are built around these METLs and all events contained in T&R Manuals relate directly to this METL. This comprehensive T&R Program will help to ensure the Marine Corps continues to improve its combat readiness by training more efficiently and effectively. Ultimately, this will enhance the Marine Corps' ability to accomplish real-world missions.

2. The T&R Manual contains the individual and collective training requirements to prepare units to accomplish their combat mission. The T&R Manual is not intended to be an encyclopedia that contains every minute detail of how to accomplish training. Instead, it identifies the minimum standards that Marines must be able to perform in combat. The T&R Manual is a fundamental tool for commanders to build and maintain unit combat readiness. Using this tool, leaders can construct and execute an effective training plan that supports the unit's METL. More detailed information on the Marine Corps Ground T&R Program is found in reference (a).

1001. UNIT TRAINING

1. The training of Marines to perform as an integrated unit in combat lies at the heart of the T&R program. Unit and individual readiness are directly related. Individual training and the mastery of individual core skills serve as the building blocks for unit combat readiness. A Marine's ability to perform critical skills required in combat is essential. However, it is not necessary to have all individuals within a unit fully trained in order for that organization to accomplish its assigned tasks. Manpower shortfalls, temporary assignments, leave, or other factors outside the commander's control, often affect the ability to conduct individual training. During these periods, unit readiness is enhanced if emphasis is placed on the individual training of Marines on-hand. Subsequently, these Marines will be mission ready and capable of executing as part of a team when the full complement of personnel is available.

2. Commanders will ensure that all tactical training is focused on their combat mission. The T&R Manual is a tool to help develop the unit's training plan. In most cases, unit training should focus on achieving unit proficiency in the core capabilities METL. However, commanders will adjust their training focus to support METLs associated with a major OPLAN/CONPLAN or named operation as designated by their higher commander and reported accordingly in the Defense Readiness Reporting System (DRRS). Tactical

training will support the METL in use by the commander and be tailored to meet T&R standards. Commanders at all levels are responsible for effective combat training. The conduct of training in a professional manner consistent with Marine Corps standards cannot be over emphasized.

3. Commanders will provide personnel the opportunity to attend formal and operational level courses of instruction as required by this Manual. Attendance at all formal courses must enhance the warfighting capabilities of the unit as determined by the unit commander.

1002. UNIT TRAINING MANAGEMENT

1. Unit Training Management (UTM) is the application of the Systems Approach to Training (SAT) and the Marine Corps Training Principles. This is accomplished in a manner that maximizes training results and focuses the training priorities of the unit in preparation for the conduct of its wartime mission.

2. UTM techniques, described in references (b) and (e), provide commanders with the requisite tools and techniques to analyze, design, develop, implement, and evaluate the training of their unit. The Marine Corps Training Principles, explained in reference (b), provide sound and proven direction and are flexible enough to accommodate the demands of local conditions. These principles are not inclusive, nor do they guarantee success. They are guides that commanders can use to manage unit-training programs. The Marine Corps training principles are:

- Train as you fight
- Make commanders responsible for training
- Use standards-based training
- Use performance-oriented training
- Use mission-oriented training
- Train the MAGTF to fight as a combined arms team
- Train to sustain proficiency
- Train to challenge

3. To maintain an efficient and effective training program, leaders at every level must understand and implement UTM. Guidance for UTM and the process for establishing effective programs are contained in references (a) through (g).

1003. SUSTAINMENT AND EVALUATION OF TRAINING

1. The evaluation of training is necessary to properly prepare Marines for combat. Evaluations are either formal or informal, and performed by members of the unit (internal evaluation) or from an external command (external evaluation).

2. Marines are expected to maintain proficiency in the training events for their MOS at the appropriate grade or billet to which assigned. Leaders are responsible for recording the training achievements of their Marines. Whether it involves individual or collective training events, they must ensure proficiency is sustained by requiring retraining of each event at or

before expiration of the designated sustainment interval. Performance of the training event, however, is not sufficient to ensure combat readiness. Leaders at all levels must evaluate the performance of their Marines and the unit as they complete training events, and only record successful accomplishment of training based upon the evaluation. The goal of evaluation is to ensure that correct methods are employed to achieve the desired standard, or the Marines understand how they need to improve in order to attain the standard. Leaders must determine whether credit for completing a training event is recorded if the standard was not achieved. While successful accomplishment is desired, debriefing of errors can result in successful learning that will allow ethical recording of training event completion. Evaluation is a continuous process that is integral to training management and is conducted by leaders at every level and during all phases of planning and the conduct of training. To ensure training is efficient and effective, evaluation is an integral part of the training plan. Ultimately, leaders remain responsible for determining if the training was effective.

3. The purpose of formal and informal evaluation is to provide commanders with a process to determine a unit's/Marine's proficiency in the tasks that must be performed in combat. Informal evaluations are conducted during every training evolution. Formal evaluations are often scenario-based, focused on the unit's METs, based on collective training standards, and usually conducted during higher-level collective events. References (a) and (f) provide further guidance on the conduct of informal and formal evaluations using the Marine Corps Ground T&R Program.

1004. ORGANIZATION

1. The Ground Ordnance Maintenance T&R Manual is community-based, written to support Occupational Field 21. The manual is not intended, nor should it be used as a stand-alone document. The manual is organized in three major areas.

a. Chapter 1 is an overview of the Marine Corps's Training and Readiness program. It consists of elements common to all MOSs that are pertinent to successful implementation of a Training and Readiness program. Chapter 1 also outlines the organization and key elements of the Ground Ordnance Maintenance T&R Manual, with an explanation of each key element.

b. Chapters 2 and 3 consist of the Mission Essential Tasks and collective training events for the Ground Ordnance Maintenance Community. Collective training events are arranged by event code, which includes the Community (ORDM), a Functional/Duty area which indicates the appropriate supported MET, and a Level/Sequence number.

c. Chapters 4 through 17 consist of the Individual Training Events, arranged by MOS/EVENT CODE. Indexes of events precede each chapter for easy reference.

1005. T&R EVENT CODING

1. T&R events are coded for ease of reference. Each event has a 4-4-4-digit identifier. The first four digits are referred to as a "community" and

represent the unit type or occupation (ORDM, 2146, etc.). The second four digits represent the functional or duty area (ADMN, CSSO, SCTY, etc.). The last four digits represent the level and sequence of the event.

2. The T&R levels are illustrated in Figure 1. An example of the T&R coding used in this Manual is shown in Figure 2.

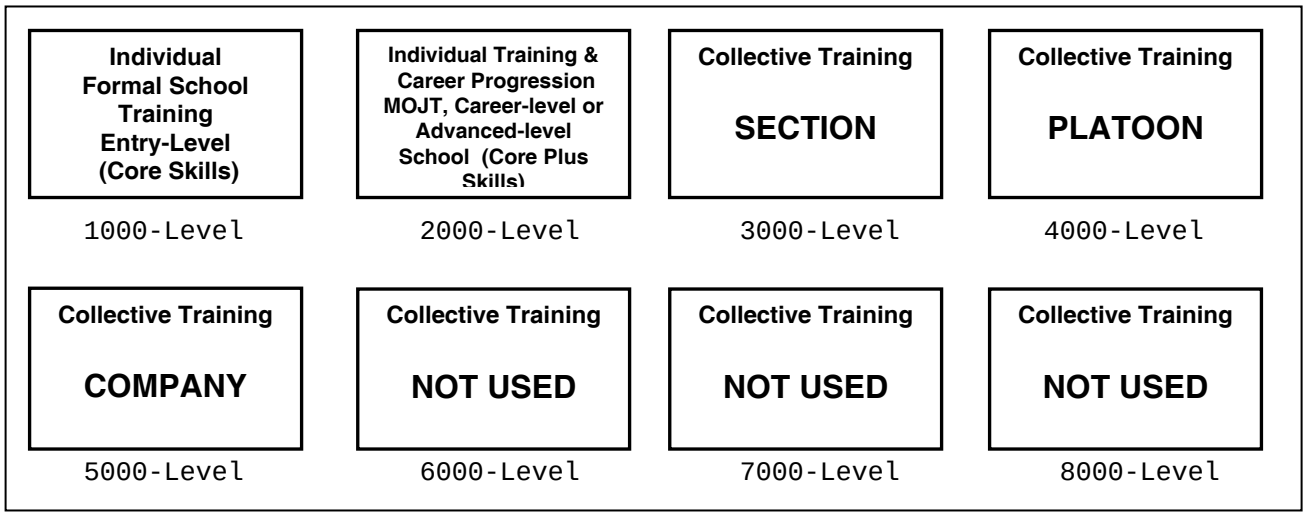

Figure 1: T&R Event Levels

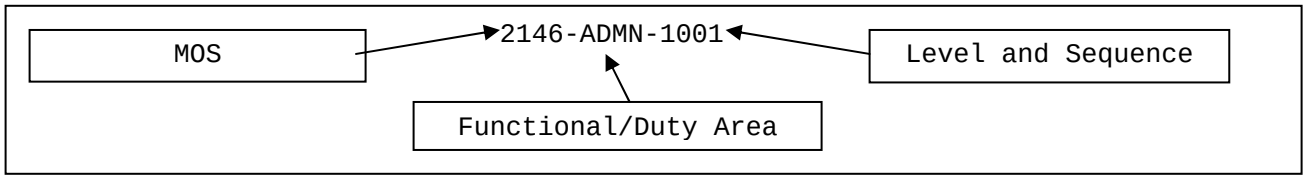

Figure 2: T&R Event Coding

1006. COMBAT READINESS PERCENTAGE

1. The Marine Corps Ground T&R Program includes processes to assess readiness of units and individual Marines. Every unit in the Marine Corps maintains a basic level of readiness based on the training and experience of the Marines in the unit. Even units that never trained together are capable of accomplishing some portion of their missions. Combat readiness assessment does not associate a quantitative value for this baseline of readiness, but uses a "Combat Readiness Percentage", as a method to provide a concise descriptor of the recent training accomplishments of units and Marines.

2. Combat Readiness Percentage (CRP) is the percentage of required training events that a unit or Marine accomplishes within specified sustainment intervals.

3. In unit-based T&R Manuals, unit combat readiness is assessed as a percentage of the successfully completed and current (within sustainment interval) key training events called "Evaluation-Coded" (E-Coded) Events. E-Coded Events and unit CRP calculation are described in follow-on paragraphs.

CRP achieved through the completion of E-Coded Events is directly relevant to readiness assessment in DRRS.

4. Individual combat readiness, in both unit-based and community-based T&R Manuals, is assessed as the percentage of required individual events in which a Marine is current. This translates as the percentage of training events for his/her MOS and grade (or billet) that the Marine successfully completes within the directed sustainment interval. Individual skills are developed through a combination of 1000-level training (entry-level formal school courses), individual on-the-job training in 2000-level events, and follow-on formal school training. Skill proficiency is maintained by retraining in each event per the specified sustainment interval.

1007. EVALUATION-CODED (E-CODED) EVENTS

1. Unit-type T&R Manuals can contain numerous unit events, some for the whole unit and others for integral parts that serve as building blocks for training. To simplify training management and readiness assessment, only collective events that are critical components of a mission essential task (MET), or key indicators of a unit's readiness, are used to generate CRP for a MET. These critical or key events are designated in the T&R Manual as Evaluation-Coded (E-Coded) events. Formal evaluation of unit performance in these events is recommended because of their value in assessing combat readiness. Only E-Coded events are used to calculate CRP for each MET.

2. The use of a METL-based training program allows the commander discretion in training. This makes the T&R Manual a training tool rather than a prescriptive checklist.

1008. CRP CALCULATION

1. Collective training begins at the 3000 level (team, crew or equivalent). Unit training plans are designed to accomplish the events that support the unit METL while simultaneously sustaining proficiency in individual core skills. Using the battalion-based (unit) model, the battalion (7000-level) has collective events that directly support a MET on the METL. These collective events are E-Coded and the only events that contribute to unit CRP. This is done to assist commanders in prioritizing the training toward the METL, taking into account resource, time, and personnel constraints.

2. Unit CRP increases after the completion of E-Coded events. The number of E-Coded events for the MET determines the value of each E-Coded event. For example, if there are 4 E-Coded events for a MET, each is worth 25% of MET CRP. MET CRP is calculated by adding the percentage of each completed and current (within sustainment interval) E-Coded training event. The percentage for each MET is calculated the same way and all are added together and divided by the number of METS to determine unit CRP. For ease of calculation, we will say that each MET has 4 E-Coded events, each contributing 25% towards the completion of the MET. If the unit has completed and is current on three of the four E-Coded events for a given MET, then they have completed 75% of the MET. The CRP for each MET is added together and divided by the number of METS to get unit CRP; unit CRP is the average of MET CRP.

For Example:

MET 1: 75% complete (3 of 4 E-Coded events trained)
MET 2: 100% complete (6 of 6 E-Coded events trained)
MET 3: 25% complete (1 of 4 E-Coded events trained)
MET 4: 50% complete (2 of 4 E-Coded events trained)
MET 5: 75% complete (3 of 4 E-Coded events trained)

To get unit CRP, simply add the CRP for each MET and divide by the number of METS:

MET CRP: 75 + 100 + 25 + 50 + 75 = 325

Unit CRP: 325 (total MET CRP)/ 5 (total number of METS) = 65%

1009. T&R EVENT COMPOSITION

1. This section explains each of the components of a T&R event. These items are included in all events in each T&R Manual.

a. Event Code (see Sect 1006). The event code is a 4-4-4 character set. For individual training events, the first 4 characters indicate the occupational field. The second 4 characters indicate functional area (ADMN, SCTY, CSSO, MAIN, etc.). The third 4 characters represents the level at which the task is performed and a sequence number for the event.

b. Event Title. The event title is the name of the event.

c. E-Coded. This is a "yes/no" category to indicate whether or not the event is E-Coded. If yes, the event contributes toward the CRP of the associated MET. The value of each E-Coded event is based on number of E-Coded events for that MET. Refer to paragraph 1008 for detailed explanation of E-Coded events.

d. Supported MET(s). List all METs that are supported by the training event.

e. Sustainment Interval. This is the period, expressed in number of months, between evaluation or retraining requirements. Skills and capabilities acquired through the accomplishment of training events are refreshed at pre-determined intervals. It is essential that these intervals are adhered to in order to ensure Marines maintain proficiency.

f. Billet. Individual training events may contain a list of billets within the community that are responsible for performing that event. This ensures that the billet's expected tasks are clearly articulated and a Marine's readiness to perform in that billet is measured.

g. Grade. Each individual training event will list the rank(s) at which Marines are required to learn and sustain the training event.

h. Initial Training Setting. For Individual T&R Events only, this specifies the location for initial instruction of the training event in one of three categories (formal school, managed on-the-job training, distance

learning). Regardless of the specified Initial Training Setting, any T&R event may be introduced and evaluated during managed on-the-job training.

(1) "FORMAL" – When the Initial Training Setting of an event is identified as "FORMAL" (formal school), the appropriate formal school or training detachment is required to provide initial training in the event. Conversely, formal schools and training detachments are not authorized to provide training in events designated as Initial Training Setting "MOJT" or "DL." Since the duration of formal school training must be constrained to optimize Operating Forces' manning, this element provides the mechanism for Operating Forces' prioritization of training requirements for both entry-level (1000-level) and career-level (2000-level) T&R Events. For formal schools and training detachments, this element defines the requirements for content of courses.

(2) "DL" – Identifies the training event as a candidate for initial training via a Distance Learning product (correspondence course or MarineNet course).

(3) "MOJT" – Events specified for Managed On-the-Job Training are to be introduced to Marines, and evaluated, as part of training within a unit by supervisory personnel.

i. Event Description. Provide a description of the event purpose, objectives, goals, and requirements. It is a general description of an action requiring learned skills and knowledge (e.g. Camouflage the M1A1 Tank).

j. Condition. Describe the condition(s), under which tasks are performed. Conditions are based on a "real world" operational environment. They indicate what is provided (equipment, materials, manuals, aids, etc.), environmental constraints, conditions under which the task is performed, and any specific cues or indicators to which the performer must respond. When resources or safety requirements limit the conditions, this is stated.

k. Standard. The standard indicates the basis for judging effectiveness of the performance. It consists of a carefully worded statement that identifies the proficiency level expected when the task is performed. The standard provides the minimum acceptable performance parameters and is strictly adhered to. The standard for collective events is general, describing the desired end-state or purpose of the event. While the standard for individual events specifically describe to what proficiency level in terms of accuracy, speed, sequencing, quality of performance, adherence to procedural guidelines, etc., the event is accomplished.

l. Event Components. Describe the actions composing the event and help the user determine what must be accomplished and to properly plan for the event.

m. Prerequisite Events. Prerequisites are academic training or other T&R events that must be completed prior to attempting the task. They are lower-level events or tasks that give the individual/unit the skills required to accomplish the event. They can also be planning steps, administrative requirements, or specific parameters that build toward mission accomplishment.

n. Chained Events. Collective T&R events are supported by lower-level collective and individual T&R events. This enables unit leaders to effectively identify subordinate T&R events that ultimately support specific mission essential tasks. When the accomplishment of any upper-level events, by their nature, result in the performance of certain subordinate and related events, the events are "chained." The completion of chained events will update sustainment interval credit (and CRP for E-Coded events) for the related subordinate level events.

o. Related Events. Provide a list of all Individual Training Standards that support the event.

p. References. The training references are utilized to determine task performance steps, grading criteria, and ensure standardization of training procedures. They assist the trainee in satisfying the performance standards, or the trainer in evaluating the effectiveness of task completion. References are also important to the development of detailed training plans.

q. Distance Learning Products (IMI, CBT, MCI, etc.). Include this component when the event can be taught via one of these media methods vice attending a formal course of instruction or receiving MOJT.

r. Support Requirements. This is a list of the external and internal support the unit and Marines will need to complete the event. The list includes, but is not limited to:

- Range(s)/Training Area
- Ordnance
- Equipment
- Materials
- Other Units/Personnel
- Other Support Requirements

s. Miscellaneous. Provide any additional information that assists in the planning and execution of the event. Miscellaneous information may include, but is not limited to:

- Admin Instructions
- Special Personnel Certifications
- Equipment Operating Hours
- Road Miles

2. Community-based T&R manuals have several additional components not found in unit-based T&R manuals. These additions do not apply to this T&R Manual.

1010. CBRNE TRAINING

1. All personnel assigned to the operating force must be trained in chemical, biological, radiological, nuclear, and explosive incident defense (CBRNE), in order to survive and continue their mission in this environment. Individual proficiency standards are defined as survival and basic operating standards. Survival standards are those that the individual must master in order to survive CBRNE attacks. Basic operating standards are those that the

individual, and collectively the unit, must perform to continue operations in a CBRNE environment.

2. In order to develop and maintain the ability to operate in an CBRNE environment, CBRNE training is an integral part of the training plan and events in this T&R Manual. Units should train under CBRNE conditions whenever possible. Per reference (c), all units must be capable of accomplishing their assigned mission in a contaminated environment.

1011. NIGHT TRAINING

1. While it is understood that all personnel and units of the operating force are capable of performing their assigned mission in "every climate and place," current doctrine emphasizes the requirement to perform assigned missions at night and during periods of limited visibility. Basic skills are significantly more difficult when visibility is limited.

2. To ensure units are capable of accomplishing their mission they must train under the conditions of limited visibility. Units should strive to conduct all events in this T&R Manual during both day and night/limited visibility conditions. When there is limited training time available, night training should take precedence over daylight training, contingent on individual, crew, and unit proficiency.

1012. OPERATIONAL RISK MANAGEMENT (ORM)

1. ORM is a process that enables commanders to plan for and minimize risk while still accomplishing the mission. It is a decision making tool used by Marines at all levels to increase operational effectiveness by anticipating hazards and reducing the potential for loss, thereby increasing the probability of a successful mission. ORM minimizes risks to acceptable levels, commensurate with mission accomplishment.

2. Commanders, leaders, maintainers, planners, and schedulers will integrate risk assessment in the decision-making process and implement hazard controls to reduce risk to acceptable levels. Applying the ORM process will reduce mishaps, lower costs, and provide for more efficient use of resources. ORM assists the commander in conserving lives and resources and avoiding unnecessary risk, making an informed decision to implement a course of action (COA), identifying feasible and effective control measures where specific measures do not exist, and providing reasonable alternatives for mission accomplishment. Most importantly, ORM assists the commander in determining the balance between training realism and unnecessary risks in training, the impact of training operations on the environment, and the adjustment of training plans to fit the level of proficiency and experience of Sailors/Marines and leaders. Further guidance for ORM is found in references (b) and (d).

1013. APPLICATION OF SIMULATION

1. Simulations/Simulators and other training devices shall be used when they are capable of effectively and economically supplementing training on the

identified training task. Particular emphasis shall be placed on simulators that provide training that might be limited by safety considerations or constraints on training space, time, or other resources. When deciding on simulation issues, the primary consideration shall be improving the quality of training and consequently the state of readiness. Potential savings in operating and support costs normally shall be an important secondary consideration.

2. Each training event contains information relating to the applicability of simulation. If simulator training applies to the event, then the applicable simulator(s) is/are listed in the "Simulation" section and the CRP for simulation training is given. This simulation training can either be used in place of live training, at the reduced CRP indicated; or can be used as a precursor training for the live event, i.e., weapons simulators, convoy trainers, observed fire trainers, etc. It is recommended that tasks be performed by simulation prior to being performed in a live-fire environment. However, in the case where simulation is used as a precursor for the live event, then the unit will receive credit for the live event CRP only. If a tactical situation develops that precludes performing the live event, the unit would then receive credit for the simulation CRP.

1014. MARINE CORPS GROUND T&R PROGRAM

1. The Marine Corps Ground T&R Program continues to evolve. The vision for Ground T&R Program is to publish a T&R Manual for every readiness-reporting unit so that core capability METs are clearly defined with supporting collective training standards, and to publish community-based T&R Manuals for all occupational fields whose personnel augment other units to increase their combat and/or logistic capabilities. The vision for this program includes plans to provide a Marine Corps training management information system that enables tracking of unit and individual training accomplishments by unit commanders and small unit leaders, automatically computing CRP for both units and individual Marines based upon MOS and rank (or billet). Linkage of T&R Events to the Marine Corps Task List (MCTL), through the core capability METs, has enabled objective assessment of training readiness in the DRRS.

2. DRRS measures and reports on the readiness of military forces and the supporting infrastructure to meet missions and goals assigned by the Secretary of Defense. With unit CRP based on the unit's training toward its METs, the CRP will provide a more accurate picture of a unit's readiness. This will give fidelity to future funding requests and factor into the allocation of resources. Additionally, the Ground T&R Program will help to ensure training remains focused on mission accomplishment and that training readiness reporting is tied to units' METLs.

GROUND ORD MAINT T&R MANUAL

CHAPTER 2

MISSION ESSENTIAL TASKS MATRIX

CHAPTER 2

MISSION ESSENTIAL TASKS MATRIX

2000. SERVICE-LEVEL MISSION ESSENTIAL TASKS MATRIX. Below is the Service-Level Mission Essential Task List (METL) Table, which includes the designated MET number, title, and evaluation-coded events that support the MET.

MET #1	**Conduct Combat Service Support Ordnance Maintenance Operations**
ORDM-CSSO-3003	Execute embark plan for organizational equipment
ORDM-CSSO-3005	Establish field maintenance areas and equipment collection points
ORDM-CSSO-3006	Conduct convoy operations in support of unit missions (day and night)
ORDM-CSSO-3007	Employ maintenance contact teams
ORDM-CSSO-3008	Conduct recovery of ordnance weapon systems and equipment
ORDM-CSSO-3009	Conduct evacuation of ordnance weapons systems and equipment
ORDM-CSSO-5005	Coordinate distribution of ordnance assets
MET #2	**Ensure Physical Security for Ground Ordnance Weapons/Equipment**
ORDM-SCTY-3010	Employ organic crew served weapons
ORDM-SCTY-3011	Manage deadly force procedures program
ORDM-SCTY-3014	Manage the accountability of Ammo and Explosives
ORDM-SCTY-3015	Conduct rear area security operations
ORDM-SCTY-3016	Conduct squad/platoon level patrolling in support of rear area security operations
MET #3	**Perform Ground Ordnance Maintenance Admin Functions**
ORDM-ADMN-3001	Perform administrative functions in support of maintenance programs
ORDM-ADMN-4002	Identify repair parts requirements
ORDM-ADMN-4003	Coordinate the requisition and distribution of repair parts
ORDM-ADMN-4006	Manage calibration program
ORDM-ADMN-4008	Manage publication control program
ORDM-ADMN-4012	Manage load testing program
ORDM-ADMN-4014	Manage shop safety program
ORDM-ADMN-5003	Coordinate and conduct command inspections/programs to enhance equipment/unit readiness
ORDM-ADMN-5004	Coordinate the acquisition of equipment shortfalls

GROUND ORD MAINT T&R MANUAL

CHAPTER 3

COLLECTIVE EVENTS

CHAPTER 3

COLLECTIVE EVENTS

3000. PURPOSE. This chapter includes all collective events. A collective event is an event that an established unit would perform in combat. These events are linked to a Service-Level Mission Essential Task (MET). This linkage tailor's collective and individual training for the selected MET. Each collective event is composed of component events that provide the major actions required. This may be likely actions, list of functions, or procedures. Accomplishment and proficiency level required of component events are determined by the event standard.

3001. EVENT CODING. T&R events are coded for ease of reference. Each event has a 4-4-4 digit identifier. The first four digits represent the occupational field: Ordnance Maintenance (ORDM. The second four digits represent the functional or duty area: Combat Service Support Operations (CSSO), Security (SCTY), and Administrative Functions (ADMN). The last four digits represent the level and identifier number of the event. The Ground Ord Maint collective events are separated into three levels:

Level	Job Focus	Number Series	Example
Career	Perform	3000	ORDM-CSSO-3001
Intermediate	Manage	4000	ORDM-ADMN-4001
Advanced	Advice	5000	ORDM-CSSO-5001

Every event has a unique identifier number from 001 to 999.

3002. ORDNANCE REQUIREMENTS. Ordnance requirements cited in these tasks are drawn from Marine Corps Bulletin (MCBul) 8010.

3003. INDEX OF COLLECTIVE EVENTS BY LEVEL

3004. 3000-LEVEL EVENTS

ORDM-ADMN-3001: Perform administrative functions as required in support of maintenance programs.

SUPPORTED MET(S): 3

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Coordinate assignments of ordnance equipment to specific maintenance programs and complete forms as required to document support actions.

CONDITION: Provided with ordnance equipment and applicable resources, maintenance program references, SOPs, and commander's intent.

STANDARD: To ensure long-term supportability of ordnance weapons systems and equipment.

EVENT COMPONENTS:
1. Joint Oil Analysis Program (JOAP).
2. Corrosion Prevention and Control (CPAC) Program.
3. Physical security program.
4. Safety program
5. Hazardous materials/Waste programs.
6. Layettes management.
7. PM/CM programs.
8. Demilitarization programs.
9. New equipment fielding programs.
10. Embark programs.
11. Support equipment and TMDE programs.
12. Related programs (PQDR, SDR RODS, 10772, etc.).
13. Load testing programs.
14. Publication control.
15. Armory procedures.
16. Maintenance training.
17. Arms, Ammunition, and Explosive management programs.

REFERENCES:
1. MCO P4790.2 MIMMS Field Procedures Manual
2. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

ORDM-CSSO-3002: Identify ordnance maintenance support requirements in support of unit missions

SUPPORTED MET(S): 1

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Compile support requirements that adequately establish maintenance capabilities.

CONDITION: Given the unit T/O&E, operation order, CMR, applicable references and the requirement to support a given unit.

STANDARD: Maintain ordnance equipment readiness of the supported unit at a minimum of 75%.

EVENT COMPONENTS:
1. Identify maintenance float block.
2. Identify required tools.
3. Identify required test sets.
4. Identify required support equipment
5. Identify CSS support references.
6. Identify and coordinate unit T/O&E review.
7. Identify recovery capabilities.
8. Identify engineer requirements.
9. Identify lift requirements.

RELATED EVENTS:

2102-ADMN-2002	2111-ADMN-1001	2102-ADMN-2004
2102-ADMN-2005	2102-ADMN-2006	2102-ADMN-2007
2102-ADMN-2008	2102-ADMN-2009	2102-ADMN-2010
2102-ADMN-2011	2102-ADMN-2012	2102-ADMN-2013
2102-ADMN-2014	2102-ADMN-2015	2102-ADMN-2016
2102-ADMN-2018	2102-ADMN-2003	

REFERENCES:
1. MCO P4400.150E Consumer Level Policy Manual
2. MCO P4790.2 MIMMS Field Procedures Manual

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA: Facility Code 17413 Field Training Area

ORDM-CSSO-3003: Execute embark plan for organizational equipment

SUPPORTED MET(S): 1

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Execute embark plans for organizational equipment.

CONDITION: Provided access to the T/O&E, operations order, embark SOP (if available) and available embarkation assets.

STANDARD: Arrive at the assigned area with the appropriate equipment to conduct ordnance maintenance.

EVENT COMPONENTS:
1. Review embark SOP.
2. Identify organic equipment to be embarked
3. Develop EDL.
4. Identify and request T/E deficiencies.
5. Identify and prepare containers required for embarkation

6. Perform weatherproofing to containers and equipment.
7. Identify and embark required PEB.
8. Identify and embark Class IX consumable and repairable blocks.
9. Identify and embark required HAZMAT & POLs.
10. Identify and embark required publications.
11. Consolidate embark plan with adjacent elements/units.
12. Identify and request support (i.e. MHE) equipment required.
13. Provide data for entry into MDSSII.

REFERENCES:
1. MCO 4400.16 Uniform Material Movement Issue and Priority System (UMMIPS)

ORDM-CSSO-3004: Conduct MPF/ATF maintenance inspections in support of off/on load

SUPPORTED MET(S): 1

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Conduct maintenance checks and services for ordnance equipment loaded aboard MPF ships and in other types of equipment storage pools.

CONDITION: Given applicable resources, equipment requiring inspection and servicing, and timelines for completion as established by the operations order.

STANDARD: Ensure equipment readiness of forward deployed assets in accordance with established timelines.

EVENT COMPONENTS:
1. Compile a list of equipment requiring servicing.
2. Coordinate assignment of appropriate personnel.
3. Allocate required tools, sets, chests, and kits to conduct maintenance.
4. Conduct maintenance services.
5. Identify repair parts requirements.
6. Acquire required repair parts.
7. Track completion of services.
8. Document completion of all maintenance transactions.
9. Coordinate the distribution of assets with appropriate personnel.

RELATED EVENTS:

2125-ADMN-2011	2146-MANT-1047	2146-MANT-1055
2120-ADMN-2011	2181-ADMN-2010	2110-ADMN-2011
2147-MANT-1004		

REFERENCES:
1. Automated Inspection Reporting System (AIRS) checklist

ORDM-CSSO-3005: Establish field maintenance areas and equipment collection points

SUPPORTED MET(S): 1

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Set up expeditionary field maintenance areas to provide preventative and corrective maintenance on ordnance equipment and facilitate the coordination of equipment collection points as far forward as possible to ensure expeditious equipment evacuation, and/or Battle Damage Assessment and Repair.

CONDITION: Given appropriate references, equipment, personnel, facilities, and adequate support assets.

STANDARD: Maintain unit readiness in a field environment at 75% or higher at all times.

EVENT COMPONENTS:
1. Perform Leaders Reconnaissance.
2. Set up maintenance shelters.
3. Set up power.
4. Set up climate controlled areas.
5. Establish local security.
6. Establish hazardous material collection point.
7. Establish fuel farm.
8. Identify supply distribution point.
9. Establish primary end item collection point.
10. Identify field maintenance areas.
11. Determine maintenance space requirements.
12. Identify assets for embark.
13. Submit fuel request.
14. Submit requests for ammunition.
15. Submit request for external heavy lift/personnel transportation support.
16. Submit request for external personnel requirements such as generator mechanics, refrigeration mechanics, and communications specialists.

REFERENCES:
1. Applicable Equipment Technical Manuals
2. MCO P4790.2 MIMMS Field Procedures Manual

SUPPORT REQUIREMENTS:

ORDNANCE:

DODIC	
G955	Grenade, Hand Violet Smoke M18
G963	Grenade, Hand Riot CS M7A3
A111	Cartridge, 7.62mm Blank M82 Linked
G945	Grenade, Hand Yellow Smoke M18
A080	Cartridge, 5.56mm Blank M200 Single
G930	Grenade, Hand Smoke HC AN-M8
G950	Grenade, Hand Red Smoke M18

RANGE/TRAINING AREA: Facility Code 17413 Field Training Area

EQUIPMENT: Embark requirements must be taken into account for, but not limited to, all maintenance resources, to include shelters, supply, and personnel. Physical Security must be taken into account for any items requiring security.

ORDM-CSSO-3006: Conduct convoy operations in support of unit missions (day and night)

SUPPORTED MET(S): 1

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 3 months

DESCRIPTION: Conduct day and night convoy operations to move CSS elements from origin to destination while maintaining security and control.

CONDITION: Provided mission, vehicles, equipment, personnel and adequate training area.

STANDARD: Execute convoy operations per the references and OPLAN.

EVENT COMPONENTS:
1. Identify required personnel and equipment.
2. Set up communications.
3. Plan route.
4. Plan security.
5. Plan for self recovery/repair.
6. Prepare convoy brief.
7. Coordinate supporting arms.
8. Conduct rehearsals.
9. Plan immediate actions.
10. Conduct equipment and personnel inspections.
11. Identify rally points.
12. Plan MEDEVAC procedures.
13. Identify and request required logistics support, internal and external (fuel, ammo, water, etc).
14. Plan alternate routes.
15. Prepare route overlays.

RELATED EVENTS:
2102-ADMN-2007 2141-MANT-1007 2120-TECH-2025
2110-TECH-2024

REFERENCES:
1. FMFM 2-6 MAGTF Rear Area Security
2. FMFM 6 Ground Combat Operations
3. MCDP 1-3 Tactics

ORDM-CSSO-3007: Employ maintenance contact teams

SUPPORTED MET(S): 1

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 3 months

DESCRIPTION: Employ task organized contact to effect on-site repairs of battle damaged ordnance equipment, apply required modifications.

CONDITION: Provided necessary maintenance resources (equipment and personnel) and forward located inoperative ordnance equipment.

STANDARD: Repair forward located ordnance equipment to a satisfactory operating level, per the references.

EVENT COMPONENTS:
1. Form contact teams based on mission.
2. Assess situation.
3. Identify required equipment.
4. Make liaison with supported unit, HHQ Intel, and Operations sections.
5. Establish and maintain communications.
6. Provide security.
7. Plan route (to and from).
8. Request external support requirements.
9. Submit AAR.
10. Conduct movement to and from site.
11. Maintain security and control during all movements.
12. Perform required maintenance actions or recovery.

ORDM-CSSO-3008: Conduct recovery of ordnance weapons systems and equipment

SUPPORTED MET(S): 1

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Conduct battle damage assessment and repair or recovery of unserviceable/inoperative weapon systems and equipment.

CONDITION: Provided required recovery assets and a variety of forward located unserviceable ordnance equipment.

STANDARD: Ensure that unserviceable/inoperative ordnance weapons systems and equipment are recovered, in order to enable the repair and return of serviceable ordnance assets to forward elements.

EVENT COMPONENTS:
1. Assess the situation.
2. Establish communications with supported units.
3. Establish communications with recovery teams.
4. Establish collection points.
5. Identify required equipment and personnel.
6. Conduct route reconnaissance.
7. Operate recovery equipment.
8. Provide necessary documentation to equipment owner.
9. Conduct battle damage assessment.
10. Conduct repair.

ORDM-CSSO-3009: Conduct evacuation of ordnance weapons systems and equipment

SUPPORTED MET(S): 1

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Conduct evacuation of unserviceable/inoperative ordnance systems and equipment to supporting CSSE.

CONDITION: Provided required recovery assets and forward located unserviceable ordnance equipment.

STANDARD: Evacuate forward located ordnance equipment to appropriate maintenance collection areas per the reference.

EVENT COMPONENTS:
1. Identify supporting activities.
2. Identify and make liaison with any supporting civilian agencies (DHL, FedEx, Host Nation trucking, etc).
3. Establish and maintain communications with supporting activities.
4. Establish method(s) of evacuation to supporting activities.
5. Identify equipment requiring evacuation.
6. Identify personnel and equipment required.
7. Coordinate with external activities for support (air, sea, heavy lift).
8. Request/Coordinate contact team support.
9. Arrange for replacement/return of evacuated equipment.
10. Replace via Class VII, redistribute, etc.
11. Ensure required documentation/receipts are completed and retained.

ORDM-SCTY-3010: Employ organic crew-served weapons

SUPPORTED MET(S): 2

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Employ, emplace and coordinate crew-served weapons.

CONDITION: Provide organic crew-served weapons, personnel and tactical scenario.

STANDARD: Provide adequate fire support to CSS elements.

EVENT COMPONENTS:
1. Employ vehicle mounted crew served weapons.
2. Identify required equipment for vehicle mounting.
3. Perform required PM and function checks.
4. Incorporate crew served weapons in RAS plan.
5. Assign sectors of fire, PDFs, and FPFs.
6. Assign crew-served weapons teams.
7. Emplace crew served weapons.
8. Create range cards and fire plans.

SUPPORT REQUIREMENTS:

ORDNANCE:
DODIC
A576 Cartridge, Caliber .50 4 API M8/1 AP
A151 Cartridge, 7.62mm 4 Ball/1 Tracer Li
B542 Cartridge, 40mm HEDP M430/M430A1 Lin

ROOMS/BUILDINGS: Armory

ORDM-SCTY-3011: Manage deadly force procedures program

SUPPORTED MET(S): 2

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 1 month

DESCRIPTION: Develop/maintain a program that trains personnel in the proper application of deadly force procedures.

CONDITION: Given appropriate resources, equipment, facilities, and personnel.

STANDARD: Protect sensitive government property and prevent the inappropriate use of deadly force by guard personnel.

EVENT COMPONENTS:
1. Conduct deadly force briefs.
2. Conduct deadly force training.
3. Obtain equipment to train individuals/units.
4. Conduct testing of the levels of deadly force.
5. Identify the level of classification of security material being protected.
6. Understand Rules of Engagement if applicable.

REFERENCES:
1. MCO 5500.6 Arming Of Security and Law Enforcement (LE) Personnel and the Use of Force

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17530 Record Fire Range Non-Automated
Facility Code 17570 Pistol Known Distance (KD) Range
Facility Code 17550 Rifle Known Distance (KD) Range
Facility Code 17320 Training Aids Center

EQUIPMENT: 782 gear, Flak jacket, Kevlar, Individual weapon system/crew-serve weapon system, Note taking gear, and appropriate uniform.

ORDM-SCTY-3012: Manage physical security procedures for an armory

SUPPORTED MET(S): 2

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 1 month

DESCRIPTION: Provide physical security for arms during the standard business day and during field exercises; ensure adequate security is in place when the armory is closed.

CONDITION: Given appropriate resources, equipment, facilities, and personnel.

STANDARD: Prevent physical loss of arms and ammunition.

EVENT COMPONENTS:
1. Appoint armory guard/duty.
2. Maintain security ammunition.
3. Coordinate reactionary training drills.
4. Coordinate with MPs to ensure IDs systems are working properly.

REFERENCES:
1. MCO 4340.1A Reporting Missing, Lost, Stolen, or Recovered (MLSR) Government Property
2. MCO 5500.6 Arming Of Security and Law Enforcement (LE) Personnel and the Use of Force
3. MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems
4. MCO P5530.14 Marine Corps Physical Security Program Manual
5 OPNAVINST 5530.13C Physical Security and Loss Prevention
6. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures

---

ORDM-SCTY-3013: Manage the accountability of arms

SUPPORTED MET(S): 2

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 1 month

DESCRIPTION: Conduct inventories as required and provide guidance to the commander, S4, and supply personnel on specific arms accountability procedures as outlined in the directives.

CONDITION: Given the applicable resources.

STANDARD: Maintain 100% weapons accountability at all times and provide an accurate audit trail of all arms transactions.

EVENT COMPONENTS:
1. Coordinate daily sight counts (open/close).
2. Coordinate with Supply/S4 to ensure that required monthly-serialized inventories are being conducted by disinterested 3rd parties.
3. Coordinate with Supply to ensure CRANE reporting is being conducted.

SUPPORT REQUIREMENTS:

ROOMS/BUILDINGS: Armory

EQUIPMENT: 782 gear, flak jacket, kevlar, individual weapon system/crew serve weapon system, note taking gear, and appropriate uniform.

ORDM-SCTY-3014: Manage the accountability of Ammo and explosives

SUPPORTED MET(S): 2

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Develop/Maintain a program that accounts for all Ammunition and Explosive (A&E) items within the unit.

CONDITION: Given security ammunition and emergency explosives, an armory, and appropriate references.

STANDARD: Account for, properly store, issue, and maintain all A&E assets.

EVENT COMPONENTS:
1. Coordinate ammo expenditure reports.
2. Identify the procedures for tracking security ammunition through an active, traceable audit trail.
3. Manage ammo-handling procedures.
4. Manage AA&E screening and qualification program.
5. Manage security ammunition.
6. Evaluate armory facility/storage area for compliance with physical security references.
7. Identify requirements for transportation and storage of AA&E.
8. Identify procedures for reporting MLSR.

REFERENCES:
1. OPNAVINST 5530.13C Physical Security and Loss Prevention

ORDM-SCTY-3015: Conduct rear area security operations

SUPPORTED MET(S): 2

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Plan and conduct rear area security operations IAW threat level to detect and counter enemy actions while maintaining CSS operations.

CONDITION: Provide training area, tactical scenario, equipment, and personnel.

STANDARD: Provide adequate rear area security for CSS area commensurate with threat level.

EVENT COMPONENTS:
1. Estimate enemy (SALUTE).
2. Estimate situation.
3. Assign and place automatic weapons.
4. Construct barriers and fortifications.
5. Assign security roles to personnel.
6. Identify reactionary force roles.
7. Rehearse immediate action drills.
8. Conduct security patrols.

9. Coordinate supporting arms.
10. Establish communications (internal and supporting).
11. Establish entry control point(s).
12. Assign sectors of fire.
13. Build bunkers.

ORDM-SCTY-3016: Conduct squad/platoon level patrolling in support of rear area security operations

SUPPORTED MET(S): 2

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Plan and conduct squad/platoon level patrols IAW threat level to detect and counter enemy actions while maintaining ordnance maintenance operator operations.

CONDITION: Provided training area, tactical scenario, equipment and personnel.

STANDARD: Provide squad/platoon patrols in support of rear area security for CSS are commensurate with threat level.

EVENT COMPONENTS:
1. Assign patrols.
2. Train personnel.
3. Conduct rehearsals.
4. Establish communications and signals (with COMM).
5. Establish communications and signals (without COMM).
6. Coordinate supporting fires.
7. Establish med-evac procedures.
8. Identify rules of engagement.
9. ID procedures to re-enter friendly lines (normal and emergency).

3005. 4000-LEVEL EVENTS

ORDM-ADMN-4001: Establish procedures for the security of weapons, tools, and equipment

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: Establish procedures to maintain accountability and control of weapons, tools, and equipment.

CONDITION: Provided a CSS site, weapons, tools, and maintenance equipment.

STANDARD: Ensure that weapons and equipment are issued, retrieved, and accounted for during all phases of the operation.

EVENT COMPONENTS:
1. Identify security levels required by equipment type.
2. Identify security personnel.
3. Establish CSS security.
4. Establish accountability procedures for equipment (equipment logs, ECR's, individual CMR's).
5. Establish armory facility.
6. Assign equipment to authorized personnel.

ORDM-ADMN-4002: Identify repair parts requirements

SUPPORTED MET(S): 3

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Identify, procure, document, and utilize required repair parts and secondary reparable items in support of unit operations.

CONDITION: Given an operational order, EDL, Table of Equipment, assigned equipment, and personnel, past mission historical data, after action reports, and required publication.

STANDARD: To enable the timely repair of forward deployed ordnance weapons systems and equipment in support of unit operations.

EVENT COMPONENTS:
1. Review historical data and Class IX consumable and repairable parts.
2. Based on operation and equipment density list, determine appropriate Class IX quantities.
3. Review after action reports to highlight previous mission problem areas.

REFERENCES:
1. MCO 4733.1 Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
2. MCO P4400.150E Consumer Level Policy Manual

3. MCO P4790.2 MIMMS Field Procedures Manual
4. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures

---

ORDM-ADMN-4003: Coordinate the requisition and distribution of repair parts

SUPPORTED MET(S): 3

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Coordinate with the unit MMO and Supply to comply with requisition procedures for repair parts and ensure that personnel are familiar with those procedures. Once parts are received, coordinate the distribution of those parts to the mechanic who can complete the repairs.

CONDITION: Given a mission statement, T/O&E, and operations order.

STANDARD: To ensure requisitions are processed per operations order and, once requisitions are received, they are applied to the appropriate equipment.

EVENT COMPONENTS:
1. Consider units to be supported.
2. Establish supply module.
3. Set up layette bins.
4. Consider terrain.
5. Coordinate with MMO to establish commodity representatives.
6. Administration (MIMMS).

REFERENCES:
1. MCO 4733.1 Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
2. MCO P4400.150E Consumer Level Policy Manual
3. MCO P4790.2 MIMMS Field Procedures Manual
4. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures

---

ORDM-ADMN-4004: Manage radiological program

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 18 months

DESCRIPTION: Identify the proper care, handling, disposal, and reporting procedures for items containing radiological materials.

CONDITION: Given appropriate references and equipment containing radiological materials.

STANDARD: Minimize the effects of radiological exposure from the misuse/handling of items containing radiological materials and comply with current reporting requirements of radiological equipment references.

EVENT COMPONENTS:
1. Review unit T/E to identify TAM items that contain radioactive materials.
2. Review appropriate references for proper handling and disposal.
3. Follow applicable reporting procedures.

REFERENCES:
1. MCO 5104.3 Marine Corps Radiation Safety Program

ORDM-ADMN-4005: Manage modification control program

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Develop and manage a modifications control program based on the units T/E.

CONDITION: Given unit T/E, SL-1/2, PLMS, and unit's publications library.

STANDARD: Apply required modifications, document modification actions and ensure equipment operates according to the modification applications.

EVENT COMPONENTS:
1. Review unit T/E to determine equipment within a unit.
2. Review with SL-1-2 to determine which modifications are needed per each TAM item within that unit.
3. Review Publications library to ensure all applicable MIs are on hand.
4. Verify that all modifications required per each TAM item, are either completed or on order.
5. Ensure that Modifications control forms are properly completed.
6. Ensure all records are properly filed.

REFERENCES:
1. MCO P4790.2 MIMMS Field Procedures Manual
2. SL-1-2 Index of Authorized Publication for Equipment Support
3. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures

---

ORDM-ADMN-4006: Manage calibration program

SUPPORTED MET(S): 3

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Identify all Test Measuring and Diagnostic Equipment (TMDE) requiring calibrations, submit assets for calibrations, and conduct management of the program for future requirements. Implement procedures that reduce the threat of fraud, waste, and abuse. Ensure proper use of support equipment for organic assets.

CONDITION: Given organic tools, equipment, TMDE, and applicable references.

STANDARD: Ensure equipment is maintained in accordance with guidelines established for the management of support equipment and TMDE.

EVENT COMPONENTS:
1. Validate T/E to determine equipment requirements.
2. Identify equipment requiring calibration.
3. Implement tool control procedures.

REFERENCES:
1. MCO 4733.1 Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
2. TI-4733-15/1 Calibration Requirements

ORDM-ADMN-4007: Manage military occupational specialty (MOS) training program

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Develop and manage an MOS training program IAW unit's mission, T/O, ITSs, collective events, and directives providing procedures and guidance to establish and conduct MOS training in support of unit operations.

CONDITION: Given a unit T/O, unit METs, ITS's, and personnel of Ground Ordnance Maintenance MOSs.

STANDARD: Ensure properly trained personnel are available to perform assigned missions.

EVENT COMPONENTS:
1. Determine maintenance capability by reviewing T/O&E mission statements.
2. Identify individual MOSs by reviewing unit T/O.
3. Extract ITSs for each particular MOS within unit.
4. Develop training plan to accommodate unit's METs.
5. Train individuals.

REFERENCES:
1. MCO P4790.2 MIMMS Field Procedures Manual

SUPPORT REQUIREMENTS:

EQUIPMENT: Binders and shelves

OTHER SUPPORT REQUIREMENTS: T/O&E and current PLMS.

ORDM-ADMN-4008: Manage publication control program

SUPPORTED MET(S): 3

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 3 months

DESCRIPTION: Provide a publications library to research information required to support maintenance actions.

CONDITION: Given a unit T/O and T/E, unit mission requirements, and access to PLMS.

STANDARD: The library should be capable of rapid deployment and contain TMs, TIs, MIs, SIs, SLs, and other pertinent directives as required by unit missions and in accordance criteria outlined in MCO P4790.2.

EVENT COMPONENTS:
1. Review Unit T/E.
2. Identify required publications by reviewing SL-1-2/SL-1-3.
3. Review publications library to assure that all publications and changes are needed and required.
4. Request and validate publications that are required.
5. Implement changes and organize library per the references.

REFERENCES:
1. MCO P4790.2 MIMMS Field Procedures Manual
2. MCO P5215.17 USMC Technical Publications System
3. MCO P5600.31G Marine Corps Publications and Printing Regulations
4. SL-1-2 Index of Authorized Publication for Equipment Support
5. SL-1-3 Index of Authorized Publication for Equipment Support

---

ORDM-ADMN-4009: Manage unit oil analysis program

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Identify all ordnance equipment that qualifies for placement in the Joint Oil Analysis Program (JOAP), assign those assets to the program, and manage the program in support of unit missions.

CONDITION: Given appropriate references and access to the unit T/E, CMR, and JOAP references.

STANDARD: Prevent catastrophic engine failures through oil analysis and reduce the long-term maintenance cost of ordnance vehicles.

EVENT COMPONENTS:
1. Identify items requiring induction into JOAP by reviewing unit T/E and appropriate references.
2. Conduct oil sampling per the references.
3. Record and maintain records for JOAP per the references.
4. Identify shipping and handling procedures for JOAP per the references.
5. Take appropriate action based on sampling analysis.

REFERENCES:
1. TI-4731-14/1C MC Joint Oil Analysis Program

ORDM-ADMN-4010: Manage unit administrative storage program to support long-term equipment readiness

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Placed designated equipment into administrative storage programs as required and manage the scheduling of maintenance tasks required for items in the program.

CONDITION: Given applicable reference, commander's intent, appropriate storage facility, and equipment designated for administrative storage.

STANDARD: Provide mission capable ordnance equipment in support of long-term equipment readiness.

EVENT COMPONENTS:
1. Establish/Review/Update local SOPs regarding the Administrative Storage Program.
2. Identify procedures to induct equipment into the Administrative Storage Program.
3. Induct equipment into the Administrative Storage Program.
4. Identify, update, and properly code Administrative Storage Candidates.
5. Ensure items inducted into the Administrative Storage Program do not exceed timelines in accordance with the reference.

REFERENCES:
1. MCO P4790.2 MIMMS Field Procedures Manual

ORDM-ADMN-4011: Manage licensing program

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Develop and manage a Licensing Program to properly log, examine, and certify ordnance vehicle operators in the performance of their duties. Identify individuals that need Ordnance Vehicle Operators Licenses and develop a program to effectively train, test, and track individuals.

CONDITION: Given applicable references, personnel requiring licensing, and specific ordnance vehicles.

STANDARD: Accurately develop and manage a Licensing Program to accommodate unit requirements.

EVENT COMPONENTS:
1. Review T/O and T/E to determine equipment that requires licensed operators.
2. Assign licensing officer/SNCO and test examiners.
3. Log and maintain records of individuals licensed.
4. Provide written testing and operator training.

REFERENCES:
1. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures
2. MCO 8400.6 Licensing Procedure for Ordnance Vehicle Operators

---

ORDM-ADMN-4012: Manage load testing program

SUPPORTED MET(S): 3

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Develop and manage a load testing program to accommodate a specific unit by identifying equipment requiring load-testing certification.

CONDITION: Given a unit T/E, CMR, and appropriate references.

STANDARD: Reduce the risk of load lifting/bearing hazards in the work place and comply with current directives.

EVENT COMPONENTS:
1. Identify the references and components for a load testing program.
2. Identify frequencies for load testing equipment.
3. Inspect, record, and maintain record jackets and documents.
4. Identify equipment required to be load tested.
5. Conduct an annual load test certification.

REFERENCES:
1. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
2. MCO P4790.2 MIMMS Field Procedures Manual
3. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures

---

ORDM-ADMN-4013: Manage laser program

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Develop and manage a laser safety program in support of unit operations.

CONDITION: Given a unit T/E and appropriate references.

STANDARD: Reduce the threat of laser injuries in the workplace.

EVENT COMPONENTS:
1. Review unit T/E and identify all equipment within a particular unit containing lasers.
2. Identify classifications of lasers within a unit.
3. Identify equipment marking to determine if equipment contains a laser or is a potential radiation safety hazard.

4. Identify laser/radiation safety references.
5. Identify the procedures to respond to a laser injury or a radiological incident.

REFERENCES:
1. MCO 5104.3 Marine Corps Radiation Safety Program
2. MCO P4790.2 MIMMS Field Procedures Manual
3. TI-5104-15/2 Special Handling of Tritium Fire Control Instruments

---

ORDM-ADMN-4014: Manage shop safety program

SUPPORTED MET(S): 3

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Ensure compliance with published safety orders and directives in developing and maintaining operations in support of unit missions.

CONDITION: Given a work environment, personnel and equipment, and appropriate references.

STANDARD: Reduce and/or eliminate the risk of injury to maintenance personnel while performing required unit missions.

EVENT COMPONENTS:
1. Identify that a units particular needs (hard hats, safety boots, safety goggles, MSDS's etc.) are met.
2. Ensure references and resources/protective equipment are available.
3. Implement ORM into unit's daily routine (ORM charts posted in work spaces).
4. Provide required training.

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. MCO 3500.27 Operational Risk Management
3. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order
4. MCO P4790.2 MIMMS Field Procedures Manual

ORDM-ADMN-4015: Manage tool control program

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Implement procedures for tool control that reduce the threat of fraud, waste, and abuse.

CONDITION: Given organic tools, equipment, and applicable references.

STANDARD: Ensure tool accountability is maintained in accordance with established guidelines.

EVENT COMPONENTS:
1. Validate T/E to determine equipment requirements.
2. Implement tool control procedures.

REFERENCES:
1. MCO P4400.150E Consumer Level Policy Manual
2. MCO P4790.2 MIMMS Field Procedures Manual
3. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures

3006. 5000-LEVEL EVENTS

ORDM-ADMN-5001: Draft/Review ordnance policies, directives, regulations and logistics appendices

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Draft/Review written policies, directives, regulations, and logistics appendices in support of unit maintenance operations to provide clarification, standard operating procedures and any amplifying instructions.

CONDITION: Given Marine Corps Orders and Directives, Unit Standing Operating Procedures, Naval Instructions, Department of Defense Publications, and Equipment Technical Publications.

STANDARD: Provide supported elements with necessary instruction on maintenance support of ordnance weapons systems and equipment.

EVENT COMPONENTS:
1. Review orders and directives.
2. Coordinate with supply.
3. Establish shop policy.
4. Assign personnel.
5. Coordinate with individual section and validate drafts.
6. Provide guidance to commanders in support of ordnance maintenance operations and physical security functions.

REFERENCES:
1. MCO P5215.17 USMC Technical Publications System
2. SL-1-2 Index of Authorized Publication for Equipment Support
3. SL-1-3 Index of Authorized Publication for Equipment Support

---

ORDM-ADMN-5002: Coordinate assignment of ordnance personnel

SUPPORTED MET(S): 3

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 6 months

DESCRIPTION: Review unit T/Os and/or operation orders; assign OccFld 21 personnel to specific billets/assignments in support of assigned operations. Coordinate with the occupational field sponsor and monitor to assist in filling personnel shortfalls.

CONDITION: Given a unit T/O, mission orders, and access to personnel monitors/sponsors.

STANDARD: To ensure key ordnance maintenance personnel are available to support unit missions.

EVENT COMPONENTS:
1. View units mission statement.
2. View supported units T/O and T/E.
3. View supporting units mission statements.
4. Access TFMS.
5. Track inbound and outbound personnel.
6. Maintain lists of key billets for specific operations.
7. Validate the T/O.
8. Review the mission statement.
9. Review operation order.
10. Submit Table of Organization Change Requests.

REFERENCES:
1. MCO 4733.1 Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
2. MCO P4400.150E Consumer Level Policy Manual
3. MCO P4790.2 MIMMS Field Procedures Manual
4. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures

---

ORDM-ADMN-5003: Conduct command inspections to enhance equipment/unit readiness

SUPPORTED MET(S): 3

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 12 months

CONDITION: Given orders, directives, policies, and logistics appendices.

STANDARD: Evaluate unit readiness, efficiencies and compliance with established Marine Corps policies and directives.

EVENT COMPONENTS:
1. Review orders and directives governing maintenance programs.
2. Inspect for serviceability of ordnance weapons systems and equipment.
3. Inspect unit publications control program.
4. Inspect unit modification control program.
5. Inspect unit maintenance control program.
6. Inspect unit support equipment and TMDE tool control program.

REFERENCES:
1. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist

---

ORDM-ADMN-5004: Coordinate the acquisition of equipment shortfalls

SUPPORTED MET(S): 3

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 3 months

DESCRIPTION: Validate the T/O&E and operation Equipment Density List (EDL) to determine equipment shortfalls for SAC 1, 2, 3 TAMCNs and reconcile with supply and HHQ to acquire deficiencies.

CONDITION: Given a T/O&E and EDL for a specific operation for supporting and supported units.

STANDARD: Requisition equipment deficiencies needed to support the unit's mission.

EVENT COMPONENTS:
1. Review higher HQ capabilities.
2. Review T/O and T/E.
3. Review unit CMR.
4. Review unit EDL.
5. Review op order.
6. Review mission statement from T/O.

REFERENCES:
1. MCO 4733.1 Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
2. MCO P4400.150E Consumer Level Policy Manual
3. MCO P4790.2 MIMMS Field Procedures Manual
4. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures

---

ORDM-CSSO-5005: Coordinate distribution of ordnance assets

SUPPORTED MET(S): 1

EVALUATION-CODED: YES **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Coordinate, manage, and disseminate all required ordnance assets to assigned units. This event applies to MPF/ATF/EEAP/NALMEB.

CONDITION: Given an Equipment Density List (EDL), access to Total Force Management Structure (TFMS), list of units conducting operations, appropriate reference(s), equipment, and personnel.

STANDARD: Ensure all assigned units receive sufficient equipment to perform assigned missions IAW Oplans.

EVENT COMPONENTS:
1. Identify embarkation assets.
2. Identify T/E deficiencies.
3. Identify unit assets.
4. Identify unit deficiencies.
5. Identify tool/special tool requirements.
6. Identify individual points of contact within the unit.
7. Identify support assets.
8. Review supportability estimate.
9. Identify mission requirements.
10. Identify MPF sourcing IAW OPLAN.
11. Identify organic requirements/tasks.
12. Submit organic requirements to MDSII/TPFDI.
13. Identify shortfalls.
14. Submit requisitions to cover shortfalls.
15. Reconcile backorder requisitions.

16. Distribute backorder receipts.
17. Validate Sac 3 Sustainment as provided from HHQ.
18. Re-evaluate supportability.

REFERENCES:

1. FMFM 4-3 MAGTF Landing Support Operations
2. MCWP 4-1 Logistics Operations

GROUND ORD MAINT T&R MANUAL

CHAPTER 4

MOS 2102 INDIVIDUAL EVENTS

CHAPTER 4

MOS 2102 INDIVIDUAL EVENTS

4000. PURPOSE. This chapter details the individual events that pertain to the 2102 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

4001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2102-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 2000-level events.

4002. INDEX OF INDIVIDUAL EVENTS

4003. 2000-LEVEL EVENTS

2102-ADMN-2001: Direct Ground Ordnance Programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2102

GRADES: MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure compliance with orders and directives.

PERFORMANCE STEPS:
1. Determine resource requirements.
2. Analyze capabilities.
3. Enforce maintenance management programs.
4. Monitor physical security program.
5. Coordinate Contract Logistics Support.
6. Coordinate warranty program.
7. Coordinate the execution of fielding/disposal plans.
8. Manage inspection programs.
9. Draft/disseminate correspondence documents.
10. Advise capabilities to appropriate headquarters element.

REFERENCES:
1. Local Policies/Procedures Local Policies/Procedures
2. MCBUL 3000 MARES Logistics Reportable Equipment
3. MCO 4105.2 Marine Corps Warranty Program (Nov 87)
4. MCO 4400.16_ Uniform Material Movement and Issue Priority System
5. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP) (Jun 99)
6. MCO 4855.10B Product Quality Deficiency Report (PQDR) (Jan 93)
7. MCO 5100.29A Marine Corps Safety Program (Jul 04)
8. MCO 5104.1C Navy Laser Hazards Control Program
9. MCO 5104.3 Marine Corps Radiation Safety Program
10. MCO 5530.14 Marine Corps Physical Security Program Manual
11. MCO 8025.1_ Class V (W) Malfunction and Defect Reporting
12. MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems
13. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
14. MCO P4855.4_ Procurement Quality Assurance
15. MCO P5090.2A Environmental Compliance and Protection Manual (Jul 98)
16. TB MED 524 Control of Hazards to Health from Laser Radiation
17. TI 4733-15/11_ Infantry Weapons Gauge Calibration Exchange Program
18. TI 4733-15/1_ TMDE Calibration & Maintenance Program
19. UM-PLMS Marine Corps Publications Library Management System (PLMS) Users Manual
20. Unit TO/E Table of Organization/Equipment

2102-ADMN-2002: Supervise sustainment level maintenance

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2102

BILLETS: LOGCOM

GRADES: CAPT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: In order to maintain ground equipment readiness and availability.

PERFORMANCE STEPS:
1. Draft or review applicable documents.
2. Evaluate effectiveness of supply chain management.
3. Monitor Statement of Work.
4. Coordinate with internal/external agencies.
5. Recommend modification or adjustments to stock levels and positioning.
6. Ensure compliance with configuration management.
7. Ensure compliance with containerization requirements.
8. Advise and provide oversight for Packaging, Handling, Shipping, and Transportation.
9. Manage maintenance resources.

REFERENCES:
1. MCO 4105.2_ Marine Corps Warranty Program
2. MCO P4400.150_ Consumer Level Supply Policy Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2102-ADMN-2003: Perform duties as an acquisition logistics specialist

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: This is a Marine Corps Systems Command required billet.

MOS PERFORMING: 2102

GRADES: CAPT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To provide acquisition knowledge and maintenance expertise in support of total lifecycle systems management of ground ordnance equipment.

PERFORMANCE STEPS:
1. Provide subject matter expertise on all ground ordnance equipment and items planned and fielded.
2. Provide subject matter expertise in the support of technical manual validation/verification.
3. Provide assistance in acquisition planning through development of maintenance support plans.
4. Review and evaluate all product quality deficiency reports.
5. Review and evaluate deadline criteria for ground ordnance equipment.
6. Review training requirements for new equipment.
7. Provide required support and new equipment training.
8. Coordinate and plan with Program Manager Test Measurement and Diagnostic Equipment for maintenance support.

REFERENCES:
1. MCO 4000.57_ Marine Corps Total Life Cycle Management (TLCM) of Ground Weapons Equipment and Material
2. MCO 4733.1 Marine Corps Test Measurement Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
3. MCO 4855.10_ Product Quality Deficiency Report (PQDR)
4. MCO P4400.150_ Consumer Level Supply Policy Manual
5. MCO P4790.2_ MIMMS Field Procedures Manual
6. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2102-FLC-2101: Direct a Marine Corps Formal Learning Center

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

GRADES: CAPT, MAJ

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a table of organization and equipment, facilities, and personnel.

STANDARD: To ensure that personnel are adequately trained to standard.

PERFORMANCE STEPS:
1. Review present TO/E, and policies/procedures.
2. Develop/revise policies and procedures, as required.
3. Manage the establishment/revision of formal courses, as required.
4. Manage formal student training.
5. Manage staff and faculty development.
6. Determine resource requirements to meet the current/future formal training requirements.
7. Review/submit Programs of Instruction (POIs) and Course Descriptive Data (CDD) for formal training.
8. Review/approve Course Content Review Board (CCRB) recommendations, as required.
9. Coordinate issues requiring approval of higher headquarters, as required.
10. Manage course/curriculum evaluation, as required.

REFERENCES:
1. MCO 1553.2_ Management for Marine Corps Formal Schools & Training Centers
2. MCO 1553.3_ Unit Training Management
3. MCO 1553.5_ Marine Corps Training and Education Evaluation
4. NAVMC 3500.__ Ground Ordnance Training and Readiness Manual
5. SAT Manual U. S. Marine Corps Systems Approach to Training
6. Unit TO/E Table of Organization/Equipment

2102-MGMT-2201: Direct Operational level Ground Ordnance Maintenance

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: The individual is required to perform this task in the following areas but are not limited to: each MEF, MARFORRES, MARFORPAC, MARFORCOM, and MARFORSOC.

MOS PERFORMING: 2102

GRADES: MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure sustainment of ground ordnance equipment.

PERFORMANCE STEPS:
1. Review issues and policies.
2. Enforce policies.
3. Draft and staff maintenance policies.
4. Analyze sustainment requirements.
5. Analyze maintenance administrative effectiveness.
6. Advise total life cycle management.
7. Develop material readiness input.
8. Assist in Acquisition planning.
9. Review equipment fielding.
10. Coordinate Manpower and training requirements.
11. Draft and interpret ground ordnance policies, procedures, directives, and regulations.
12. Advise capabilities and capacities to appropriate headquarters element.
13. Validate/prioritize available resources.
14. Manage Incentive program submissions.
15. Enforce physical security programs.
16. Monitor ammunition control requirements.
17. Participate as a SME on various staffs, product working groups, and teams.

REFERENCES:
1. MCO P4400.150E Consumer-Level Supply Policy Manual (Jun 99)
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
3. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2102-MGMT-2202: Direct Tactical level Ground Ordnance Maintenance

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: The individual is required to perform duties at the following organizations: MLG and Division.

MOS PERFORMING: 2102

GRADES: CAPT, MAJ

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure sustainment of ground ordnance equipment.

PERFORMANCE STEPS:
1. Review issues and policies.
2. Draft and staff maintenance policies.
3. Enforce policies.
4. Analyze sustainment requirements.
5. Analyze maintenance administrative effectiveness.
6. Advise total life cycle management.
7. Develop material readiness input.
8. Assist in Acquisition planning.
9. Review equipment fielding.
10. Coordinate Manpower and training requirements.
11. Draft and interpret ground ordnance policies, procedures, directives, and regulations.
12. Advise capabilities and capacities to appropriate headquarters element.
13. Submit Incentive award recommendations.
14. Monitor physical security.
15. Manage AA&E.
16. Brief commander on issues pertaining to equipment maintenance, availability, deployment, and supportability.

REFERENCES:
1. Applicable ULSS Applicable Unit Logistics Support Summary
2. MCO 4000.57 Marine Corps Total Life Cycle Management (TLCM)
3. MCO P4400.150_ Consumer Level Supply Policy Manual
4. MCO P5530.14_ Marine Corps Physical Security Program Manual
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Commanders Guide to Maintenance
7. SECNAVINST 5216.5_ Correspondence Manual
8. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
9. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
10. UNIT SOP Unit's Standing Operating Procedures
11. Unit TO/E Table of Organization/Equipment

2102-MGMT-2203: Conduct fiscal analysis and control

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2102

GRADES: CAPT, MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: In order to produce and maintain a budget.

PERFORMANCE STEPS:
1. Analyze mission and resource requirements.
2. Determine operational and maintenance requirements.
3. Review existing funds available.
4. Monitor obligations/expenses.
5. Determine funding category.
6. Manage budget execution.
7. Review maintenance contracts.
8. Submit budget.

REFERENCES:
1. CURRENT BUDGET Current Fiscal Budget for Base/Post/Station
2. MCO P7100.8K Field Budget Guidance Manual
3. NAVMC 2664 Financial Guidebook for Commanders

2102-OCCF-2301: Perform Occupational Sponsor Duties

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2102

GRADES: CAPT, MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To train, staff, and equip the ground ordnance community.

PERFORMANCE STEPS:
1. Determine structure requirements.
2. Manage Manpower requirements.
3. Manage fielding requirements.
4. Manage sustainment requirements.
5. Manage training requirements.
6. Report readiness to higher headquarters.
7. Interpret OSD documents.
8. Participate in Combat Development Systems Process.
9. Interface with MCCDC, TRNGCMD, FLC, and TECOM.
10. Validate career progression training.
11. Provide input to the Training and Readiness Manual, MOS Manual, CCRBs, and MOS roadmap.
12. Validate training input plan (TIP).

13. Draft and interpret ground ordnance policies, procedures, directives, and regulations.
14. Validate Incentives programs submissions.

REFERENCES:

1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

GROUND ORD MAINT T&R MANUAL

CHAPTER 5

MOS 2110 INDIVIDUAL EVENTS

CHAPTER 5

MOS 2110 INDIVIDUAL EVENTS

5000. PURPOSE. This chapter details the individual events that pertain to the 2110 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

5001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2110-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 2000-level events.

5002. INDEX OF INDIVIDUAL EVENTS

5003. 2000-LEVEL EVENTS

2110-ADMN-2001: Direct maintenance management programs for ground ordnance vehicles

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 24 months

DESCRIPTION: This event encompasses all functional areas of maintenance management.

MOS PERFORMING: 2110

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure actions are completed to correct any deficiencies.

PERFORMANCE STEPS:
1. Analyze mission requirements.
2. Assess capabilities.
3. Coordinate resource requirements.
4. Determine external requirements.
5. Manage procedures to comply with functional areas of maintenance management.

REFERENCES:
1. Local Policies/Procedures Local Policies/Procedures
2. MCBUL 1200 Military Occupational Specialties Manual
3. MCO P4400.150_ Consumer Level Supply Policy Manual
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
6. Unit TO/E Table of Organization/Equipment

2110-ADMN-2002: Direct ground ordnance maintenance resources

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 24 months

MOS PERFORMING: 2110

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure resources are sufficient to maintain ground ordnance equipment.

PERFORMANCE STEPS:
1. Validate maintenance flow plan.
2. Determine equipment.
3. Determine facilities requirement.
4. Manage facilities.
5. Manage budget.
6. Manage tactical logistics.
7. Conduct site surveys, when applicable.
8. Validate mobilization plan.
9. Employ personnel.
10. Advise commander.

REFERENCES:
1. MCDP 4 Logistics
2. MCO 4710.8 Uniform Criteria for Repair Cost Estimated Used to Determine
3. MCO 4733.1 Marine Corps Test Measurement Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
4. MCO 5600.31_ Marine Corps Publications And Printing Regulations
5. MCO P4400.150E W/ERRATUM CONSUMER-LEVEL SUPPLY POLICY MANUAL
6. MCO P4400.150_ Consumer Level Supply Policy Manual
7. MCO P4790.2_ MIMMS Field Procedures Manual
8. MCO P5215.17C The Marine Corps Technical Publications System (Jun 96)
9. MCWP 4-11 Tactical-Level Logistics
10. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
11. UM 4400-124 Sassy Using Unit Procedures
12. Unit TO/E Table of Organization/Equipment

2110-ADMN-2003: Enforce physical security procedures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2110

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure procedures are adhered to.

PERFORMANCE STEPS:
1. Validate lock and key control procedures.
2. Validate Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Validate storage facilities.
4. Review security barriers employment.
5. Review security lighting employment.
6. Maintain Physical Security records.
7. Manage access control.

REFERENCES:
1. MCO 5530.14 Marine Corps Physical Security Program Manual

2110-ADMN-2004: Assist in acquisition management of ground ordnance vehicle(s)/associated equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: Ensure equipment is fielded as established by Program Managers.

MOS PERFORMING: 2110

GRADES: CWO-4, CWO-5

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: In accordance with established standards, authorized maintenance procedures and checklists.

PERFORMANCE STEPS:
1. Review fielding process.
2. Review fielding documents.
3. Assist in fielding plan.
4. Coordinate placement of equipment into service.
5. Monitor completion of administrative functions.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems
3. MCO P4400.82_ Regulated/Controlled Item Management Manual
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. Unit TO/E Table of Organization/Equipment

2110-TECH-2101: Manage unit ammunition control program

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2110

GRADES: WO-1, CWO-2, CWO-3

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Table of Organization & Equipment (T/O&E).

STANDARD: In accordance with established standards, authorized maintenance procedures and checklists.

PERFORMANCE STEPS:
1. Coordinate ammunition requirements.
2. Conduct ORM.
3. Ensure proper ammunition handling procedures.
4. Ensure ammunition accountability.

5. Ensure completion of administrative functions.
6. Apply continuous process improvement methods.

REFERENCES:
1. MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property (Aug 94)
2. MCO 8010.1E Class V(W) Planning Factors for Fleet Marine Force Combat Operations
3. MCO 8020.1 Handling, Transportation, Storage, Reclassification and Disposal of Class V(W) Material
4. MCO 8025.1 Malfunction and Deficiency Reporting
5. MCO P4400.150E W/ERRATUM CONSUMER-LEVEL SUPPLY POLICY MANUAL
6. MCO P8020.10B MARINE CORPS AMMUNITION MANAGEMENT AND EXPLOSIVES SAFETY POLICY PROGRAM
7. ORM 1-0 OPERATIONAL RISK MANAGEMENT
8. UM 4400-15 Marine Corps User Manual (Organic Property Control)

2110-VOPS-2201: Direct vehicle maintenance operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: The individual is responsible for directing the following: Corrective/Preventive Maintenance, Embarkation, DEMIL, Transit, load certification programs, licensing program, environmental programs, and safety programs.

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure long-term supportability of ground ordnance equipment.

PERFORMANCE STEPS:
1. Determine resources.
2. Determine maintenance objectives.
3. Determine supportability estimates.
4. Apply resources.
5. Maintain equipment.
6. Manage Quality Assurance.
7. Manage maintenance shop information requirements.
8. Prepare routine correspondence, when applicable.
9. Apply continuous process improvement methods.

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. MCO 5100.29A Marine Corps Safety Program (Jul 04)
3. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order (May 06)
4. MCO 5104.3A Marine Corps Radiation Safety Program (Jun 03)
5. MCO P4400.150_ Consumer Level Supply Policy Manual
6. MCO P4450.12 Storage and Handling of Hazardous Materials
7. MCO P4790.2_ MIMMS Field Procedures Manual

8. NAVSEATM-50420-AA-RAD-010 NAVSEATM-50420-AA-RAD-010
9. TB MED 524 Control of Hazards to Health from Laser Radiation
10. Unit TO/E Table of Organization/Equipment

2110-VREC-2301: Direct recovery operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 24 months

MOS PERFORMING: 2110

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure the recovery of equipment is safely accomplished.

PERFORMANCE STEPS:
1. Assess recovery requirements.
2. Validate Battle Damage Assessment and Repair (BDAR), if applicable.
3. Develop salvage/disposal procedures.
4. Develop recovery ORM.
5. Execute operation(s).

REFERENCES:
1. FM 9-43-2 Recovery and Battlefield Damage Assesment and Repair
2. FMFRP 4-34 Recovery and Battlefield Damage Assessment and Repair
3. MCO P11240.106 GARRISON MOBILE EQUIPMENT
4. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
5. MCO P4790.2_ MIMMS Field Procedures Manual
6. NAVFAC P-307 Management of Weight Handling Equipment
7. TI 8005-25/12 Maintenance Sub-Merged Ordnance Combat Vehicle
8. Unit TO/E Table of Organization/Equipment

GROUND ORD MAINT T&R MANUAL

CHAPTER 6

MOS 2111 INDIVIDUAL EVENTS

CHAPTER 6

MOS 2111 INDIVIDUAL EVENTS

6000. PURPOSE. This chapter details the individual events that pertain to the 2111 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

6001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2111-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 1000 and 2000-level events.

6002. INDEX OF INDIVIDUAL EVENTS

6003. 1000-LEVEL EVENTS

2111-ADMN-1001: Utilize Automated Information Systems (AIS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to accurately reflect condition of the equipment.

PERFORMANCE STEPS:
1. Determine appropriate publication(s).
2. Determine appropriate forms and/or records.
3. Input required data.
4. Submit forms and/or records.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2111-ADMN-1002: Perform administrative functions

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an Armory.

STANDARD: To ensure actions are completed to correct any deficiencies.

PERFORMANCE STEPS:
1. Adhere to safety regulations.
2. Adhere to hazardous material regulations.
3. Comply with LASER safety procedures.
4. Comply with radiological program.

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. DOD INST 6050.5 DOD Hazard Communication Program
3. Local Policies/Procedures Local Policies/Procedures

4. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order (May 06)
5. MCO 5104.1C Navy Laser Hazards Control Program
6. MCO 5104.3 Marine Corps Radiation Safety Program
7. MCO 5104.3A Marine Corps Radiation Safety Program (Jun 03)
8. MCO P5090.2A Environmental Compliance and Protection Manual (Jul 98)
9. NAVMC DIR 5100.8 Marine Corps Occupational Safety and Health (OSH) Program Manual (May 06)

2111-MAIN-1101: Maintain organizational tools and test equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure accountability and serviceability of required tools and equipment to support mission requirements.

PERFORMANCE STEPS:
1. Perform user maintenance for common tools.
2. Perform user maintenance for special tools.
3. Perform user maintenance for TMDE.
4. Perform user maintenance for IWGCEP.
5. Inventory kits, sets, chests, and equipment, and complete forms and records.
6. Utilize Automated Maintenance Information Systems.

REFERENCES:
1. FM 9-243 Use and Care of Hand Tools and Measuring Tools
2. MCO P4790.2_ MIMMS Field Procedures Manual
3. SC 518-95-CL-A07 SMALL ARMS REPAIRER TOOL KIT
4. SL-3-00607A TOOL KIT, SMALL ARMS REPAIRER

2111-MAIN-1102: Maintain Direct Fire Weapon systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

DESCRIPTION: The individual is required to maintain the following weapon systems: M9, M16, M4, M240 variants, M249, M2HB variants, M107, and M1014.

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore equipment to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform Pre-Fire Inspections.
4. Perform scheduled Preventative Maintenance Checks and Services.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Utilize Automated Maintenance Information Systems.
8. Maintain maintenance records and reports.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 02498A-23&P M2 Gun, Machine
3. TM 02648C-24A&P/2 7.62MM, M14, Designated Marksman Rifle (DMR) W/E
4. TM 05538C-23&P/2 RIFLE 5.56MM M16A2 W/E
5. TM 05539C-IN SNIPER RIFLE 7.26, M40A3 & M40A5 Organizational and Intermediate Maintenance Manual
6. TM 08671A-23&P/2A Machine Gun 5.56MM M249
7. TM 09629A-23&P/2A SASR, 50 CALIBER M82A1A
8. TM 1005A-23&P/2A Pistol Semiautomatic 9MM M9
9. TM 11473A-IN/2A 7.62MM, M14, Enhanced Marksman Rifle (EMR) W/E
10. TM 9-1005-313-23&P Machinegun 7.62mm M240 Series

2111-MAIN-1103: Maintain Indirect Fire Weapon systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to maintain the following weapon systems: 60mm and 81mm mortars, M203, MK19 variants, M79, MK 153 SMAW, and Multi-Shot Grenade Launcher variants.

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore equipment to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform Pre-Fire Inspections.
4. Perform scheduled Preventative Maintenance Checks and Services.
5. Perform organizational maintenance, as required.

6. Perform intermediate maintenance, as required.
7. Utilize Automated Maintenance Information Systems.
8. Maintain maintenance records and reports.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 08521A-23&P/2A Machine Gun 40MM MK19 MOD 3
3. TM 0922A-20&P/2 81MM MORTAR M252
4. TM 1010-223-34&P MORTAR 60MM LIGHTWEIGHT
5. TM 9-1010-205024 W/CH 1-3 Launcher Grenade 40MM M79
6. TM 9-1010-221-24&P M203 Grenade Launcher

2111-MAIN-1104: Maintain weapon system bipods/tripods/mounts

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to maintain the following weapon mounts: M35, MK93, M122A1 tripod, M3 tripod, 60mm bipod/base plate, 81mm bipod/base plate.

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore equipment to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Utilize Automated Maintenance Information Systems.
7. Maintain maintenance records and reports.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 9-1005-13&P/1 Machine Gun Mounts

2111-MAIN-1105: Maintain a precision pistol

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2111

GRADES: LCPL, CPL, SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure the pistol is fully operational.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform Pre-Fire Inspections.
4. Perform scheduled Preventative Maintenance Checks and Services.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Utilize Automated Maintenance Information Systems.
8. Maintain maintenance records and reports.

REFERENCES:
1. TI 8005-24/20 Pre-Fire Inspection Small Arms Weapon Ordnance Material
2. TM 09795B-IN Pistol M45 CQBP .45 Caliber Pistol Organizational and Intermediate Maintenance Manual
3. TM 09795B-OR Pistol M45 CQBP .45 Caliber Pistol Operators Manual
4. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2111-MAIN-1106: Maintain a precision rifle

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2111

GRADES: LCPL, CPL, SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure the rifle is fully operational.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform Pre-Fire Inspections.
4. Perform scheduled Preventative Maintenance Checks and Services.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Utilize Automated Maintenance Information Systems.
8. Maintain maintenance records and reports.

REFERENCES:
1. TI 8005-24/20 Pre-Fire Inspection Small Arms Weapon Ordnance Material
2. TM 05539C-23&P M40A1 SNIPER RIFLE 7.26
3. TM 05539C-IN SNIPER RIFLE 7.26, M40A3 & M40A5 Organizational and Intermediate Maintenance Manual

4. TM 05539C-OR SNIPER RIFLE 7.26, M40A3 & M40A5 Operators Manual
5. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2111-SCTY-1201: Perform physical security measures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure armory contents are properly maintained and accounted for.

PERFORMANCE STEPS:
1. Inspect lock and key control procedures.
2. Inspect Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Inspect storage facilities.
4. Identify security barriers requirement.
5. Identify security lighting requirement.
6. Utilize Physical Security records.
7. Maintain access control.

REFERENCES:
1. MCO 5530.14 Marine Corps Physical Security Program Manual

2111-SCTY-1202: Perform armory procedures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure contents are properly maintained and accounted for.

PERFORMANCE STEPS:
1. Store AA&E.
2. Issue and recover AA&E.
3. Conduct accountability of serialized/non-serialized assets.
4. Complete required NAVMC forms and records.
5. Comply with armory security procedures.
6. Transport AA&E assets.

REFERENCES:

1. MCO 5500.6 Arming of Security and Law Enforcement (LE) Personnel and the Use of Force
2. MCO 5530.14 Marine Corps Physical Security Program Manual
3. MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems
4. MCO P4400.105E Radioactive Commodities in the Department of Defense Supply System (Mar 04)
5. MCO P4790.2_ MIMMS Field Procedures Manual
6. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

6004. 2000-LEVEL EVENTS

2111-OPS-2001: Supervise maintenance management programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2111

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure supportability of ordnance assets.

PERFORMANCE STEPS:
1. Determine requirements.
2. Maintain modification control program.
3. Maintain calibration control program.
4. Maintain new equipment warranty program.
5. Maintain ground ordnance equipment records and forms.
6. Coordinate repair and return (R&R) program.
7. Coordinate Contractor Logistics Support.
8. Submit product quality deficiency reports (PQDR).
9. Maintain publications library.
10. Maintain preventative maintenance programs.
11. Maintain corrective maintenance programs.
12. Maintain corrosion prevention and control (CPAC).
13. Coordinate embarkation of ground ordnance equipment.
14. Execute weapons exchange program.
15. Execute a Short Range Training Plan.
16. Reconcile Automated Information System data.

REFERENCES:
1. DOD 4160.21-M-1 Defense Demilitarization Manual
2. MCBUL 3000 MARES Logistics Reportable Equipment
3. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
4. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP) (Jun 99)
5. MCO 4855.10B Product Quality Deficiency Report (PQDR) (Jan 93)
6. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
7. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
8. MCO P4790.2_ MIMMS Field Procedures Manual
9. MCO P5215.17C The Marine Corps Technical Publications System (Jun 96)
10. NAVMC 2761 Catalog of Publications (Oct 07)
11. TI 4733-15/1_ TMDE Calibration & Maintenance Program
12. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
13. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
14. UM-PLMS Marine Corps Publications Library Management System (PLMS) Users Manual
15. Unit TO/E Table of Organization/Equipment

2111-OPS-2002: Supervise armory operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2111

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure optimal mission supportability.

PERFORMANCE STEPS:
1. Determine requirements.
2. Establish a work flow plan.
3. Verify DEMIL procedures, when applicable.
4. Maintain physical security program.
5. Ensure crane report is conducted.
6. Validate IWGCP requirement(s).
7. Validate TMDE requirement(s).
8. Maintain ground ordnance repair area.
9. Reconcile Automated Information System data.
10. Advise Custodian screening selection process.
11. Apply armory operational risk management (ORM).

REFERENCES:
1. DOD 4160.21-M-1 Defense Demilitarization Manual
2. MCO 5500.6 Arming of Security and Law Enforcement (LE) Personnel and the Use of Force
3. MCO 5530.14 Marine Corps Physical Security Program Manual
4. MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems
5. MCO P4400.150E Consumer-Level Supply Policy Manual (Jun 99)
6. MCO P4790.2_ MIMMS Field Procedures Manual
7. MCO P5530.14 Marine Corps Physical Security Program Manual
8. TI 4733-15/11_ Infantry Weapons Gauge Calibration Exchange Program
9. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2111-SCTY-2101: Administer physical security measures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2111

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure armory contents are properly maintained and accounted for.

PERFORMANCE STEPS:
1. Inspect lock and key control procedures.
2. Inspect Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Inspect storage facilities.
4. Determine security barriers employment.
5. Determine security lighting employment.
6. Maintain Physical Security records.
7. Manage access control.

REFERENCES:
1. MCO 5500.6 Arming of Security and Law Enforcement (LE) Personnel and the Use of Force
2. MCO 5530.14 Marine Corps Physical Security Program Manual

2111-WPNS-2201: Maintain M287 9MM AT-4 Trainer Launcher

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure equipment is maintained and fully operational.

PERFORMANCE STEPS:
1. Perform function check.
2. Perform pre-fire inspection (PFI).
3. Perform limited technical inspection (LTI).
4. Perform scheduled preventive maintenance checks and services (PMSC).
5. Identify/Isolate problem.
6. Repair/Replace unserviceable parts and/or components.
7. Secure/Store weapon.
8. Complete maintenance and administrative forms and records.

REFERENCES:
1. TM 09134A-12&P/1 AT-4 tracer trainer
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2111-WPNS-2202: Maintain M72AS LAW trainer launcher

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2111

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure equipment is maintained and fully operational.

PERFORMANCE STEPS:
1. Perform function check.
2. Perform pre-fire inspection (PFI).
3. Perform limited technical inspection (LTI).
4. Perform scheduled preventive maintenance checks and services (PMCS) on optical devices.
5. Identify/Isolate problem.
6. Repair/Replace unserviceable parts.
7. Secure/Store weapon.
8. Complete required maintenance and/or administrative forms and records.

REFERENCES:
1. TM 11250A-12&P/1 M72AS LAW TRAINER LAUNCHER
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

GROUND ORD MAINT T&R MANUAL

CHAPTER 7

MOS 2112 INDIVIDUAL EVENTS

CHAPTER 7

MOS 2112 INDIVIDUAL EVENTS

7000. PURPOSE. This chapter details the individual events that pertain to the 2112 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

7001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2112-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 2000-level events.

7002. INDEX OF INDIVIDUAL EVENTS

7003. 2000-LEVEL EVENTS

2112-ADMN-2001: Follow basic shop procedures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a work area, a precision weapons repairer's tool box, common tools, power tools, measuring tools, and current references.

STANDARD: In order to maintain assigned work area in the accomplishment of maintenance assignments in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Organize tools and equipment within work area.
3. Follow instructions for care and use of measuring tools.
4. Properly identify metals.
5. Follow basic shop mathematical procedures.
6. Follow basic blue print reading fundamentals and drafting procedures
7. Observe hazardous material regulations.

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. DOD INST 6050.5 DOD Hazard Communication Program
3. Eng Draw Interpreting Engineering Drawings
4. MCO 5100.29A Marine Corps Safety Program
5. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order
6. MCO P5090.2A Environmental Compliance and Protection Manual
7. TC 9-524 Fundamentals of Machine Tools
8. TM 9-243 Common Tools Manual
9. TSM Technical Shop Mathematics

2112-ADMN-2002: Follow basic maintenance management procedures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given required equipment records and forms, publications, calibrated test measurement and diagnostic equipment (TMDE), individual

modification requirements, precision weapons repairer's tool box, automated systems with internet access and current references.

STANDARD: Follow basic maintenance management procedures, in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Complete maintenance and/or administrative forms and records.
3. Maintain publications and directives control program.
4. Maintain a calibration control program.
5. Maintain a modification control program.
6. Maintain a tool control program.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. MCO P5215.17C The Marine Corps Technical Publications System
3. NAVMC 2761 Catalog of Publications
4. PWSR Current Precision Weapons Repairer's Tool Box Inventory
5. SL-1-2 Index of Authorized Publication for Equipment Support
6. SL-1-3 Index of Authorized Publication for Equipment Support
7. TI 4733-15/11_ Infantry Weapons Gauge Calibration Exchange Program
8. TM 10209-10/1 Use and Care of Hand Tools and Measuring Tools
9. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
10. UM 4400-124 Sassy Using Unit Procedures
11. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2112-ADMN-2003: Maintain Precision Weapons Repairman's toolbox

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a work area, a precision weapons repairer's tool box, current authorized precision weapons repairer's tool box inventory and current references.

STANDARD: Inventory the precision weapons repairer's tool box per the current precision weapons repairer's tool box inventory in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Inventory tools as required.
3. Maintain tools as required and follow instructions for the care of tools.
4. Organize tools within the work area.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual

2. PWSR Current Precision Weapons Repairer's Tool Box Inventory
3. TM 10209-10/1 Use and Care of Hand Tools and Measuring Tools

---

2112-FABR-2101: Proper use and care of hand tools

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a precision weapons repairer's tool box, safety equipment, and current references.

STANDARD: Properly use and care for hand tools in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Properly use hand tools.
3. Properly care for hand tools.
4. Properly layout work piece.
5. Properly use hand threading tools.
6. Complete maintenance and/or administrative forms and records as required.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. PWS Instruction Manual for Equipment
3. TC 9-524 Fundamentals of Machine Tools
4. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
5. TM 9-243 Common Tools Manual

2112-MACH-2201: Operate manual and hydraulic presses

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a press, work piece, safety equipment, Precision Weapons Repairer Tool Kit, and current references.

STANDARD: Operate a press in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.

2. Adjust table height.
3. Select proper holding fixture.
4. Select proper arbor.
5. Perform pressing or squeezing operation.
6. Inspect work piece.

REFERENCES:
1. TM 00526A-24&P/2 Pistol Caliber .45 MEU (SOC)
2. TM 9-243 Common Tools Manual

2112-MACH-2202: Operate band saw

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Band Saw, work piece, safety equipment, Precision Weapons Repairer Tool Kit, shop drawings and current references.

STANDARD: Properly operate a band saw in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Layout work piece.
3. Check blade on band saw.
4. Weld band saw blade.
5. Properly install band saw blade.
6. Determine proper band speed.
7. Perform cutting operation.
8. Inspect work piece.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. TC 9-524 Fundamentals of Machine Tools
3. TM 9-243 Common Tools Manual

2112-MACH-2203: Operate bead blaster

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Bead Blaster, work piece, safety equipment, Precision Weapons Repairer Tool Kit, shop drawings and current references.

STANDARD: Bead blast work piece to a uniform finish in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Conduct pre operation checks.
3. Bead blast work piece.
4. Inspect work piece.

REFERENCES:
1. EOM Equipment Operators Manual
2. Machinist Handbook Machinist Handbook
3. TC 9-524 Fundamentals of Machine Tools
4. TM 9-243 Common Tools Manual

2112-MACH-2204: Operate grinding and sanding equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a bench grinder, belt Sander, disk sander, de-burring wheel, work piece, safety equipment, Precision Weapons Repairer Tool Kit, shop drawings and current references.

STANDARD: Operate grinding and sanding equipment in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Layout work piece.
3. Operate bench grinder.
4. Operate belt sander.
5. Operate disk sander.
6. Operate de-burring wheel.
7. Inspect work piece.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. TC 9-524 Fundamentals of Machine Tools
3. TM 9-243 Common Tools Manual

2112-MACH-2205: Operate drill press

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Drill Press, work piece, safety equipment, Precision Weapons Repairer Tool Kit, shop drawings and current references.

STANDARD: Operate a drill press in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Layout work piece.
3. Select cutting speed.
4. Perform drill operation.
5. Inspect work piece.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. TC 9-524 Fundamentals of Machine Tools
3. TM 9-243 Common Tools Manual

2112-MACH-2206: Heat treating operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Heat Treatment Oven, work piece, Rockwell hardness tester, safety equipment, Precision Weapons Repairer Tool Kit, shop drawings and current references.

STANDARD: Ensure the work piece is heat treated to the proper specifications in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Set oven controls for operation.
3. Perform heat treating procedures.
4. Inspect work piece.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. TC 9-524 Fundamentals of Machine Tools

2112-MACH-2207: Operate lathe

EVALUATION-CODED: NO **SUSTAINMENT** INTERVAL: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a lathe, work piece, safety equipment, Precision Weapons Repairer Tool Kit, references, lathe cutting tools, and shop drawings.

STANDARD: Manufacture parts using a lathe to drawing specification in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Layout work piece.
3. Maintain lathe.
4. Ensure serviceability of cutting tools.
5. Set up lathe for operation.
6. Operate digital read out (DRO).
7. Perform Face operations.
8. Perform turn operations.
9. Perform drilling operations.
10. Perform Boring operations.
11. Perform Knurl operations.
12. Perform filing and polishing operations.
13. Perform tapering operations.
14. Perform parting operations.
15. Perform threading operations.
16. Inspect work piece.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. TC 9-524 Fundamentals of Machine Tools
3. TM 9-243 Common Tools Manual

2112-MACH-2208: Operate milling machine

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a milling machine, work piece, safety equipment, Precision Weapons Repairer Tool Kit, mill cutting tools, shop drawings and current references.

STANDARD: Manufacture parts using a milling machine to drawing specification in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Layout work piece.
3. Maintain milling machine.
4. Set up mill for operation.
5. Operate digital read out (DRO).
6. Ensure serviceability of cutting tools.
7. Perform planning operations.
8. Perform facing operations.
9. Performing contouring operation.
10. Perform squaring operations.
11. Perform pocketing operation.
12. Perform angle cutting operations.
13. Perform drill and boring operations.
14. Perform indexing operations.
15. Inspect work piece.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. TC 9-524 Fundamentals of Machine Tools
3. TM 9-243 Common Tools Manual

2112-MACH-2209: Operate welding and cutting equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given welding and cutting equipment, work piece, safety equipment, Precision Weapons Repairer Tool Kit, shop drawings and current references.

STANDARD: Fabricate work piece to shop drawing specifications in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Lay out work.
3. Maintain welding and cutting equipment.
4. Set up equipment for operations.
5. Perform required welding and cutting operation.
6. Inspect work piece.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. Operator's Manual Operator's Manual

3. TC 9-237 Welding Theory
4. TC 9-524 Fundamentals of Machine Tools

2112-MACH-2210: Operate Rockwell hardness tester

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Rockwell Hardness Tester, test block, safety equipment, Precision Weapons Repairer Tool Kit, and current references.

STANDARD: Obtain correct reading in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Check tester with test block for hardness range.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. TC 9-524 Fundamentals of Machine Tools
3. TM 9-243 Common Tools Manual

2112-MACH-2211: Operate surface grinder

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a surface grinder, work piece, safety equipment, Precision Weapons Repairer Tool Kit, shop drawings and current references.

STANDARD: Perform surface grinding operate to grind work piece to drawing specifications in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Layout work piece.
3. Maintain surface grinder.
4. Perform grinding operation.
5. Inspect work piece.

REFERENCES:
1. TC 9-524 Fundamentals of Machine Tools
2. TM 9-243 Common Tools Manual

2112-MREF-2301: Metal Refinishing

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given metal refinishing facilities, equipment, supplies, safety equipment, a work piece, and current references.

STANDARD: Refinish work piece to a uniform shade in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Set up refinishing operations.
3. Prepare work piece for finishing operation.
4. Perform refinishing operation.
5. Clean and inspect work piece.
6. Shut down refinishing operations.
7. Complete maintenance and/or administrative forms or records.

REFERENCES:
1. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
2. Material safety data sheets for hazardous materials
3. Refinishing Procedures

2112-PIST-2401: Maintain a Precision Pistol

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a precision pistol, a precision weapons repairer's tool box, machining equipment, precision weapons parts, safety equipment, and current references.

STANDARD: Maintain a precision pistol so that it is fully operational, in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Identify characteristic and components of the pistol.
3. Clear the pistol.
4. Disassemble the pistol.
5. Perform a Pre-fire Inspection (PFI).
6. Perform Limited Technical Inspection (LTI) as required.
7. Perform Preventive Maintenance Checks and Services (PMCS) as required.
8. Repair/replace all unserviceable parts/components as required.
9. Reassemble the pistol.
10. Perform a function check.
11. Trouble shoot.
12. Complete required forms or records.

REFERENCES:
1. Model 41 Smith & Wesson Owner's Manual
2. TI 8005-24/20E Trigger Weight Measurements and Pre-fire inspection Small Arms Weapons, Ordnance Material
3. TM 00526A-24&P/2 Pistol Caliber .45 MEU (SOC)
4. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
5. TM 9-1005-206-14P/4 Operator's Organizational Direct Support and General Support Maintenance Repair Parts and Special Tools Manual.
6. TM 9-1005-211-35 M1911A1 Maintenance Manual
7. National Match M1911A1 Pistol Build Procedures

2112-PIST-2402: Build/Rebuild a Precision Pistol

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a pistol, a precision weapons repairer's tool box, machining equipment, precision weapons parts, test facilities, ammunition, safety equipment, and current references.

STANDARD: Build/Rebuild a precision pistol that will meet accuracy standards, in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Clear weapon.
3. Disassemble the pistol.
4. Inspect all parts for serviceability as required.
5. Perform precision pistol modifications as required.
6. Perform Metal Refinishing as required.
7. Reassemble the pistol.
8. Perform a function check.
9. Perform a Quality Control (QC) Inspection as required.
10. Proof and function fire.
11. Perform accuracy test as required.
12. Accuracy Trouble shoot.
13. Complete required forms or records.

REFERENCES:
1. PWRC Current Precision Pistol Build / Rebuild Procedures
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2112-RIFL-2501: Maintain a Precision Rifle

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a precision rifle, a precision weapons repairer's tool box, machining equipment, precision weapons parts, safety equipment, and current references.

STANDARD: Maintain a precision rifle so that it is fully operational, in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Identify characteristic and components of the pistol.
3. Clear the rifle.
4. Disassemble the rifle.
5. Perform a Pre-fire Inspection (PFI).
6. Perform Limited Technical Inspection (LTI) as required.
7. Perform Preventive Maintenance Checks and Services (PMCS) as required.
8. Repair/replace all unserviceable parts/components as required.
9. Reassemble the rifle.
10. Perform a function check.
11. Trouble shoot.
12. Complete required forms or records.

REFERENCES:
1. Model 40x Model 40x Field Service Manual
2. TI 8005-24/20E Trigger Weight Measurements and Pre-fire inspection Small Arms Weapons, Ordnance Material
3. TM 02648C-24A&P/2 7.62MM, M14, Designated Marksman Rifle (DMR) W/E
4. TM 05538C-23&P/2 RIFLE 5.56MM M16A2 W/E
5. TM 05539C-23&P M40A1 SNIPER RIFLE 7.26
6. TM 11473A-IN/2A 7.62MM, M14, Enhanced Marksman Rifle (EMR) W/E
7. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
8. TM 9-1005-206-14P/4 Operator's Organizational Direct Support and General Support Maintenance Repair Parts and Special Tools Manual.

2112-RIFL-2502: Build/Rebuild a Precision Rifle

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2112

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a standard rifle, a precision weapons repairer's tool box, machining equipment, precision weapons parts, test facilities, ammunition, safety equipment, and current references.

STANDARD: Build/Rebuild a precision rifle that will meet accuracy standards in accordance with current references.

PERFORMANCE STEPS:
1. Observe safety procedures.
2. Clear weapon.
3. Disassemble the rifle.
4. Inspect all parts for serviceability as required.
5. Perform precision rifle modifications as required.
6. Perform Metal Refinishing as required.
7. Reassemble the rifle.
8. Perform a function check.
9. Perform a Quality Control (QC) Inspection as required.
10. Proof and function fire.
11. Perform accuracy test as required.
12. Accuracy Trouble shoot.
13. Complete required forms or records.

REFERENCES:
1. PWRC Current Precision Pistol Build / Rebuild Procedures
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

GROUND ORD MAINT T&R MANUAL

CHAPTER 8

MOS 2120 INDIVIDUAL EVENTS

CHAPTER 8

MOS 2120 INDIVIDUAL EVENTS

8000. PURPOSE. This chapter details the individual events that pertain to the 2120 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

8001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2120-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 2000-level events.

8002. INDEX OF INDIVIDUAL EVENTS

8003. 2000-LEVEL EVENTS

2120-ADMN-2001: Direct maintenance management programs for ground ordnance equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 24 months

DESCRIPTION: This event encompasses all functional areas of maintenance management.

MOS PERFORMING: 2120

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure actions are completed to correct any deficiencies.

PERFORMANCE STEPS:
1. Analyze mission requirements.
2. Assess capabilities.
3. Coordinate resource requirements.
4. Determine external requirements.
5. Manage procedures to comply with functional areas of maintenance management.

REFERENCES:
1. Local Policies/Procedures Local Policies/Procedures
2. MCBUL 1200 Military Occupational Specialties Manual
3. MCO P4400.150_ Consumer Level Supply Policy Manual
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
6. Unit TO/E Table of Organization/Equipment

2120-ADMN-2002: Direct ground ordnance maintenance resources

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 24 months

MOS PERFORMING: 2110

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure resources are sufficient to maintain ground ordnance equipment.

PERFORMANCE STEPS:
1. Validate maintenance flow plan.
2. Determine equipment.
3. Determine facilities requirement.
4. Manage facilities.
5. Manage budget.
6. Manage tactical logistics.
7. Conduct site surveys, when applicable.
8. Validate mobilization plan.
9. Employ personnel.
10. Advise commander.

REFERENCES:
1. MCDP 4 Logistics
2. MCO 4710.8 Uniform Criteria for Repair Cost Estimated Used to Determine
3. MCO 4733.1 Marine Corps Test Measurement Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
4. MCO P4400.150_ Consumer Level Supply Policy Manual
5. MCO P4790.2_ MIMMS Field Procedures Manual
6. MCO P5215.17C The Marine Corps Technical Publications System (Jun 96)
7. MCO P5600.31G Marine Corps Publications and Printing Regulations (Sep 93)
8. MCWP 4-11 Tactical-Level Logistics
9. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
10. UM 4400-124 Sassy Using Unit Procedures
11. Unit TO/E Table of Organization/Equipment

2120-ADMN-2003: Assist in acquisition management of ground ordnance equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: Ensure equipment is fielded as established by Program Managers.

MOS PERFORMING: 2120

GRADES: CWO-4, CWO-5

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: In accordance with established standards, authorized maintenance procedures and checklists.

PERFORMANCE STEPS:
1. Review fielding process.
2. Review fielding documents.
3. Assist in fielding plan.
4. Coordinate placement of equipment into service.
5. Monitor completion of administrative functions.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

2. MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems
3. MCO P4400.82_ Regulated/Controlled Item Management Manual
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. Unit TO/E Table of Organization/Equipment

2120-OPS-2101: Direct maintenance operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: The individual is responsible for directing the following: Corrective/Preventive Maintenance, Embarkation, DEMIL, Transit, load certification programs, environmental programs, safety programs, and MOS training.

MOS PERFORMING: 2120

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure long-term supportability of ground ordnance equipment.

PERFORMANCE STEPS:
1. Determine resources.
2. Determine maintenance objectives.
3. Determine supportability estimates.
4. Apply resources.
5. Maintain equipment.
6. Manage Quality Assurance.
7. Manage maintenance shop information requirements.
8. Prepare routine correspondence, when applicable.
9. Apply continuous process improvement methods.

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. MCO 4450.12_ Storage and Handling of Hazardous Materials
3. MCO 5100.29A Marine Corps Safety Program (Jul 04)
4. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order (May 06)
5. MCO 5104.3A Marine Corps Radiation Safety Program (Jun 03)
6. MCO P4400.150_ Consumer Level Supply Policy Manual
7. MCO P4790.2_ MIMMS Field Procedures Manual
8. MCWP 4-11.4 Commanders Guide to Maintenance
9. NAVSEATM-50420-AA-RAD-010 NAVSEATM-50420-AA-RAD-010
10. TB MED 524 Control of Hazards to Health from Laser Radiation
11. Unit TO/E Table of Organization/Equipment

2120-OPS-2102: Direct Armory Operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2120

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure accountability and security.

PERFORMANCE STEPS:
1. Manage Arms, Ammunition, Explosives (AA&E) programs.
2. Manage Physical Security requirements.
3. Manage resources.
4. Monitor Radiologic Safety programs.
5. Monitor Laser Safety programs.

REFERENCES:
1. MCO 5104.1C Navy Laser Hazards Control Program
2. MCO 5104.3 Marine Corps Radiation Safety Program
3. MCO 5530.14 Marine Corps Physical Security Program Manual

2120-TECH-2201: Manage unit ammunition control program

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2120

GRADES: WO-1, CWO-2, CWO-3

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Table of Organization & Equipment (T/O&E).

STANDARD: In accordance with established standards, authorized maintenance procedures and checklists.

PERFORMANCE STEPS:
1. Coordinate ammunition requirements.
2. Conduct ORM.
3. Ensure proper ammunition handling procedures.
4. Ensure ammunition accountability.
5. Ensure completion of administrative functions.
6. Apply continuous process improvement methods.

REFERENCES:
1. MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property (Aug 94)
2. MCO 8010.1 Class V(W) SUP FMF CBT OP

3. MCO 8020.1 Handling, Transportation, Storage, Reclassification and Disposal of Class V(W) Material
4. MCO 8025.1 Malfunction and Deficiency Reporting
5. MCO P4400.150E W/ERRATUM CONSUMER-LEVEL SUPPLY POLICY MANUAL
6. MCO P8020.10_ Marine Corps Ammunition Management and Explosives Safety Policy Program
7. ORM 1-0 OPERATIONAL RISK MANAGEMENT
8. UM 4400-15 Marine Corps User Manual (Organic Property Control)

GROUND ORD MAINT T&R MANUAL

CHAPTER 9

MOS 2125 INDIVIDUAL EVENTS

CHAPTER 9

MOS 2125 INDIVIDUAL EVENTS

9000. PURPOSE. This chapter details the individual events that pertain to the 2125 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

9001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2125-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 2000-level events.

9002. INDEX OF INDIVIDUAL EVENTS

9003. 2000-LEVEL EVENTS

2125-ADMN-2001: Direct maintenance management programs for ground ordnance electro-optic equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: This event encompasses all functional areas of maintenance management.

MOS PERFORMING: 2125

GRADES: WO-1, CWO-2, CWO-3, CWO-4

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure actions are completed to correct any deficiencies.

PERFORMANCE STEPS:
1. Analyze mission requirements.
2. Assess capabilities.
3. Coordinate resource requirements.
4. Determine external requirements.
5. Manage procedures to comply with functional areas of maintenance management.

REFERENCES:
1. Local Policies/Procedures Local Policies/Procedures
2. MCBUL 1200 Military Occupational Specialties Manual
3. MCO P4400.150_ Consumer Level Supply Policy Manual
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. Unit TO/E Table of Organization/Equipment

2125-ADMN-2002: Direct ground ordnance maintenance resources

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2125

GRADES: WO-1, CWO-2, CWO-3, CWO-4

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure resources are sufficient to maintain ground ordnance equipment.

PERFORMANCE STEPS:
1. Validate maintenance flow plan.

2. Determine equipment.
3. Determine facilities requirement.
4. Manage facilities.
5. Manage budget.
6. Manage tactical logistics.
7. Conduct site surveys, when applicable.
8. Validate mobilization plan.
9. Employ personnel.
10. Advise commander.

REFERENCES:
1. MCDP 4 Logistics
2. MCO 4710.8 Uniform Criteria for Repair Cost Estimated Used to Determine
3. MCO 4733.1 Marine Corps Test Measurement Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
4. MCO P4400.150_ Consumer Level Supply Policy Manual
5. MCO P4790.2_ MIMMS Field Procedures Manual
6. MCO P5215.17C The Marine Corps Technical Publications System (Jun 96)
7. MCO P5600.31G Marine Corps Publications and Printing Regulations (Sep 93)
8. MCWP 4-11 Tactical-Level Logistics
9. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2125-ADMN-2003: Enforce physical security procedures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2125

GRADES: WO-1, CWO-2, CWO-3, CWO-4

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure procedures are adhered to.

PERFORMANCE STEPS:
1. Validate lock and key control procedures.
2. Validate Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Validate storage facilities.
4. Review security barriers employment.
5. Review security lighting employment.
6. Maintain Physical Security records.
7. Manage access control.

REFERENCES:
1. MCO 5530.14 Marine Corps Physical Security Program Manual

2125-ADMN-2004: Assist in acquisition management of ground ordnance Electro-optical equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: Ensure equipment is fielded as established by Program Managers.

MOS PERFORMING: 2125

GRADES: CWO-4

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: In accordance with established standards, authorized maintenance procedures and checklists.

PERFORMANCE STEPS:
1. Review fielding process.
2. Review fielding documents.
3. Assist in fielding plan.
4. Coordinate placement of equipment into service.
5. Monitor completion of administrative functions.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems
3. MCO P4400.82_ Regulated/Controlled Item Management Manual
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. Unit TO/E Table of Organization/Equipment

2125-ADMN-2005: Manage Radiologic Safety program

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2125

GRADES: WO-1, CWO-2, CWO-3, CWO-4

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given requirement.

STANDARD: To ensure personnel are exposed to the lowest reasonably achievable level of ionizing radiation.

PERFORMANCE STEPS:
1. Validate Radiological safety requirements.
2. Revise and/or establish controls and policy.
3. Ensure safety of personnel.
4. Ensure radioactive material accountability is adhered to.
5. Ensure completion of administrative functions.

REFERENCES:
1. 10 CFR Parts 19, 20, and 21
2. 49 CFR 173.7 Part 173
3. DOD 4715.6-R Low Level Radioactive Waste Disposal Program
4. MCO 5104.3 Marine Corps Radiation Safety Program
5. MCO P4400.150_ Consumer Level Supply Policy Manual
6. NAVMED P-5055 Radiation Health Protection Manual
7. S0420-AA-RAD-010 NAVSEA Radiological Affairs Support Program Manual

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This is a required course taught by NAVSEA DET RASO (CDP: 9937)

2125-ADMN-2006: Manage LASER Safety program

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2125

GRADES: WO-1, CWO-2, CWO-3, CWO-4

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given requirement.

STANDARD: To ensure all personnel are not exposed to hazardous levels of LASER radiation.

PERFORMANCE STEPS:
1. Validate LASER safety requirements.
2. Revise and/or establish controls and policy.
3. Ensure safety of personnel.
4. Ensure completion of administrative functions.

REFERENCES:
1. 21 CFR 1040 Federal Performance Standard for Light Emitting Products
2. BUMEDINST 6470.23 Medical management of non-ionizing radiation casualties.
3. MCO 5104.1C Navy Laser Hazards Control Program

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This event is a billet requirement to attend training at an ALA/LNTL-approved Technical Laser Safety Officer (TLSO) course.

2125-OPS-2101: Direct maintenance operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: The individual is responsible for directing the following: Corrective/Preventive Maintenance, Embarkation, DEMIL, Transit, environmental programs, safety programs, and MOS training.

MOS PERFORMING: 2125

GRADES: WO-1, CWO-2, CWO-3, CWO-4

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure long-term supportability of ground ordnance equipment.

PERFORMANCE STEPS:
1. Determine resources.
2. Determine maintenance objectives.
3. Determine supportability estimates.
4. Apply resources.
5. Maintain equipment.
6. Manage Quality Assurance.
7. Manage maintenance shop information requirements.
8. Prepare routine correspondence, when applicable.
9. Apply continuous process improvement methods.

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. MCO 5100.29A Marine Corps Safety Program (Jul 04)
3. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order (May 06)
4. MCO 5104.3A Marine Corps Radiation Safety Program (Jun 03)
5. MCO P4400.150_ Consumer Level Supply Policy Manual
6. MCO P4450.12 Storage and Handling of Hazardous Materials
7. MCO P4790.2_ MIMMS Field Procedures Manual
8. NAVSEATM-50420-AA-RAD-010 NAVSEATM-50420-AA-RAD-010
9. TB MED 524 Control of Hazards to Health from Laser Radiation
10. Unit TO/E Table of Organization/Equipment

GROUND ORD MAINT T&R MANUAL

CHAPTER 10

MOS 2131 INDIVIDUAL EVENTS

CHAPTER 10

MOS 2131 INDIVIDUAL EVENTS

10000. PURPOSE. This chapter details the individual events that pertain to the 2131 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

10001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2131-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 1000 and 2000-level events.

10002. INDEX OF INDIVIDUAL EVENTS

10003. 1000-LEVEL EVENTS

2131-ADMN-1001: Utilize Automated Information Systems (AIS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2131

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to accurately reflect condition of the equipment.

PERFORMANCE STEPS:
1. Determine appropriate publication(s).
2. Determine appropriate forms and/or records.
3. Input required data.
4. Submit forms and/or records.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2131-ADMN-1002: Perform administrative functions

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2131

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an area of responsibility.

STANDARD: To ensure actions are completed to correct any deficiencies.

PERFORMANCE STEPS:
1. Adhere to safety regulations.
2. Adhere to hazardous material regulations.

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. DOD INST 6050.5 DOD Hazard Communication Program
3. Local Policies/Procedures Local Policies/Procedures
4. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order (May 06)
5. MCO P5090.2A Environmental Compliance and Protection Manual (Jul 98)

6. NAVMC DIR 5100.8 Marine Corps Occupational Safety and Health (OSH) Program Manual (May 06)

2131-MAIN-1101: Maintain tools and test equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2131

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure accountability and serviceability of required tools and equipment to support mission requirements.

PERFORMANCE STEPS:
1. Perform user maintenance for common tools.
2. Perform user maintenance for special tools.
3. Perform user maintenance for TMDE.
4. Inventory kits, sets, chests, and equipment, and complete forms and records.
5. Complete maintenance and/or administrative records and procedures.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. SL-3-11016A Tool Kit, Field Artillery, Organizational Maintenance M777A2 Howitzer
3. SL-3-11062A Tool Kit Field Artillery, Intermediate Maintenance M777A2 Howitzer
4. TM 9-243 Use and Care of Hand Tools and Measuring Tools

2131-MAIN-1102: Maintain Howitzer platforms

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

DESCRIPTION: The individual is required to maintain the following Howitzer components: M776 cannon tube assembly, breach operating loading tray system, (BOLTS), cradle assembly, recoil components, body assembly, saddle assembly, and digital fire control systems (DFCS).

MOS PERFORMING: 2131

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to sustain the mean time between failure rate.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Perform Quality Control.
7. Utilize Automated Maintenance Information Systems.
8. Maintain maintenance records and reports.

REFERENCES:
1. TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
2. TM 00999-23&P/1 Recoil Exercise for M198 155MM Howitzer
3. TM 10407A-10-1 (IETM) Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
4. TM 10407A-25&P/2 (IETM) Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
5. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
6. TM 9-1000-202-14 Cannon Tube Evaluation

2131-MAIN-1103: Maintain Expeditionary Fire Support System platforms

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2131

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to sustain the mean time between failure rate.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Perform Quality Control.
7. Utilize Automated Maintenance Information Systems.
8. Maintain maintenance records and reports.

REFERENCES:
1. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
2. TM-11166A-OR Mortar 120MM Rifled Towed M327

10004. 2000-LEVEL EVENTS

2131-MAIN-2001: Repair Howitzer platforms

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following Howitzer components: equilibrator, recoil buffer, and accumulator cylinder; scavenge system, elevation/traverse gear box, and brake systems.

MOS PERFORMING: 2131

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Troubleshoot failed component.
2. Conduct failure analysis.
3. Disassemble failed component.
4. Retrofit failed component.
5. Perform Quality Control procedures.
6. Maintain maintenance records and reports.

REFERENCES:
1. MCO P5090.2A Environmental Compliance and Protection Manual (Jul 98)
2. TM 10407A-10-1 (IETM) Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
3. TM 10407A-25&P/2 (IETM) Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
4. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2131-MAIN-2002: Prepare Howitzer for Embarkation

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2131

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure assets are protected from physical damage and deterioration.

PERFORMANCE STEPS:
1. Prepare equipment.
2. Complete required NAVMC forms/records.
3. Load equipment.

2131-OPS-2101: Supervise maintenance management programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2131

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure supportability of ordnance assets.

PERFORMANCE STEPS:
1. Determine requirements.
2. Maintain modification control program.
3. Maintain calibration control program.
4. Maintain new equipment warranty program.
5. Maintain ground ordnance equipment records and forms.
6. Coordinate repair and return (R&R) program.
7. Coordinate Contractor Logistics Support.
8. Submit product quality deficiency reports (PQDR).
9. Maintain publications library.
10. Maintain preventative maintenance programs.
11. Maintain corrective maintenance programs.
12. Maintain corrosion prevention and control (CPAC).
13. Coordinate embarkation of ground ordnance equipment.
14. Execute weapons exchange program.
15. Reconcile Automated Information System data.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
4. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP) (Jun 99)
5. MCO 4855.10B Product Quality Deficiency Report (PQDR) (Jan 93)
6. MCO 5100.29A Marine Corps Safety Program (Jul 04)
7. MCO 5215.1K Marine Corps Directives Management Program
8. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
9. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
10. MCO P4790.2_ MIMMS Field Procedures Manual
11. MCO P5215.17C The Marine Corps Technical Publications System (Jun 96)
12. NAVMC 2761 Catalog of Publications (Oct 07)

13. TI 4733-15/11_ Infantry Weapons Gauge Calibration Exchange Program
14. TI 4733-15/1_ TMDE Calibration & Maintenance Program
15. TI 5600 Publication Information Marine Corps Equipment
16. TI-4733-15/1 Calibration Requirements
17. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
18. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
19. UM-PLMS Marine Corps Publications Library Management System (PLMS) Users Manual

---

2131-OPS-2102: Supervise maintenance area operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Supervisors are required to establish and maintain the maintenance protocol within area of responsibility.

MOS PERFORMING: 2131

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure optimal mission supportability.

PERFORMANCE STEPS:
1. Establish a work flow plan.
2. Coordinate load testing.
3. Reconcile Automated Information System data.
4. Apply operational risk management (ORM).

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DLA Handbook DLA Handbook
3. MCBUL 3000 MARES Logistics Reportable Equipment
4. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
5. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
6. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
7. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
8. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
9. MCWP 4-11 Tactical-Level Logistics
10. UM 4400-124 Sassy Using Unit Procedures

GROUND ORD MAINT T&R MANUAL

CHAPTER 11

MOS 2141 INDIVIDUAL EVENTS

CHAPTER 11

MOS 2141 INDIVIDUAL EVENTS

11000. PURPOSE. This chapter details the individual events that pertain to the 2141 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

11001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2141-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 1000 and 2000-level events.

11002. INDEX OF INDIVIDUAL EVENTS

11003. 1000-LEVEL EVENTS

2141-ADMN-1001: Utilize Automated Information Systems (AIS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to accurately reflect condition of the equipment.

PERFORMANCE STEPS:
1. Determine appropriate publication(s).
2. Determine appropriate forms and/or records.
3. Input required data.
4. Submit forms and/or records.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2141-MAIN-1101: Maintain organizational tools and test equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure accountability and serviceability of required tools and equipment to support mission requirements.

PERFORMANCE STEPS:
1. Perform user maintenance for common tools.
2. Perform user maintenance for special tools.
3. Perform user maintenance for TMDE.
4. Perform user maintenance for AAV/FOV tools.
5. Inventory kits, sets, chests, and equipment, and complete forms and records.
6. Complete maintenance and/or administrative records and procedures.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual

2141-MAIN-1102: Maintain AAV/FOV

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to maintain the following AAV components: Hull, suspension system, electrical system, hydraulic system, water propulsion system, power plant, engine, transmission, PTO, HSU, Coolant system, AFSSS, Air aspirator, exhaust system, and Fuel system.

MOS PERFORMING: 2141

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to sustain the mean time between failure rate.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Perform Quality Control.

2141-MAIN-1103: Maintain AAVP7 Up Gunned Weapon Station (UGWS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Perform Quality Control.

REFERENCES:
1. TM 10004A-25&P/2C Maintenance Instructions and Repair Parts List Organizational, Intermediate, and Depot Upgunned Weapons Station (UGWS) Assault Amphibious Vehicle, Personnel, Model 7A1, AAVP7A1

2141-VOPS-1301: Operate AAV/FOV

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an environment.

STANDARD: Without loss of vehicle control at any time.

PERFORMANCE STEPS:
1. Perform before (land and water), at halt, during and after operation checks and services.
2. Navigate vehicle through land/water operations.
3. Employ communications equipment.
4. Employ TACNAV.
5. Employ DVE.
6. Employ smoke generator.
7. Inspect, mount, stowage SL-3 and collateral equipment.
8. Maintain Vehicle Logbook.

REFERENCES:
1. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
2. TM 07267B-10/1_ Operator's Manual, AAVR7A1.
3. TM 07268B-10/1_ Operator's Manual, AAVC7A1.
4. TM 09674A-10/3_ Operator's Manual, AAV 7A1 FOV
5. TM 10004A-10/1_ UGWS AAV7A1.

2141-VREC-1401: Employ recovery vehicle

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to salvage ground ordnance assets.

PERFORMANCE STEPS:
1. Conduct before, during and after operation checks and services on equipment.
2. Survey recovery site.
3. Make recovery calculations.
4. Determine appropriate recovery equipment.
5. Retrieve disabled vehicle.

REFERENCES:

1. FM 9-43-2 Recovery and Battlefield Damage Assesment and Repair
2. TM 07267B-10/1_ Operator's Manual, AAVR7A1.

11004. 2000-LEVEL EVENTS

2141-ADMN-2002: Supervise maintenance management programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

BILLETS: Maintenance Chief

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given ground maintenance equipment and records.

STANDARD: To ensure actions are completed to correct any deficiencies.

PERFORMANCE STEPS:
1. Determine requirements.
2. Analyze functional areas of maintenance for compliance.
3. Coordinate an annual condition inspection.
4. Ensure compliance with maintenance programs.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
3. MCO 4855.10B Product Quality Deficiency Report (PQDR)
4. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order (May 06)
5. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
6. MCO P4400.150E Consumer-Level Supply Policy Manual (Jun 99)
7. MCO P4790.2_ MIMMS Field Procedures Manual
8. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
9. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2141-ADMN-2003: Supervise maintenance area operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Supervisors are required to establish and maintain the maintenance protocol within area of responsibility.

MOS PERFORMING: 2141

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure optimal mission supportability.

PERFORMANCE STEPS:
1. Establish a work flow plan.
2. Coordinate load testing.
3. Reconcile Automated Information System data.
4. Apply operational risk management (ORM).

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. Local Policies/Procedures Local Policies/Procedures
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. UNIT SOP Unit's Standing Operating Procedures
5. Unit TO/E Table of Organization/Equipment

2141-MAIN-2101: Maintain AAV special mission kits

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure vehicle configuration meets special mission requirements.

PERFORMANCE STEPS:
1. Install special mission kits.
2. Conduct functions check.
3. Sustain equipment.

REFERENCES:
1. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1
2. TM 9-2540-205-24&P Organizational, Direct Support and General Support Maintenance

---

2141-MAIN-2102: Repair AAV/FOV

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following AAV components: Hull, suspension, electrical system, hydraulic system, track, engine, transmission, PTO, HSU, coolant system, AFSS, air aspirator, exhaust system, recovery vehicle unique components, deflector actuator, personnel heater, and fuel system.

MOS PERFORMING: 2141

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Troubleshoot failed component.
2. Conduct failure analysis.
3. Disassemble failed component.
4. Retrofit failed component.
5. Perform Quality Control procedures.

REFERENCES:
1. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1
2. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV
3. TM 8F152B-25&P/4 Power Plant Assembly, AAV/FOV & RAM/RS

2141-MAIN-2103: Perform in-storage care of AAV/FOV

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a deferred maintenance program.

STANDARD: To protect assets from physical damage and deterioration.

PERFORMANCE STEPS:
1. Prepare vehicle(s) for storage.
2. Store vehicle(s).

REFERENCES:
1. TM 09674A-10/3 Amphibious Assault Vehicle, Personnel Operators' Manual
2. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1
3. TM 10004A-25&P/2C Maintenance Instructions and Repair Parts List Organizational, Intermediate, and Depot Upgunned Weapons Station (UGWS) Assault Amphibious Vehicle, Personnel, Model 7A1, AAVP7A1

2141-MAIN-2104: Repair AAV/FOV Up Gunned Weapon Station (UGWS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following UGWS components: Elevation mechanism and power assisted traverse mechanism, equilibrator, weapons control box, power control box, and weapons cradle.

MOS PERFORMING: 2141

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Test components.
2. Disassemble components.
3. Inspect components.
4. Repair components.
5. Assemble components.
6. QC components.

REFERENCES:
1. TM 10004A-25&P/2C Maintenance Instructions and Repair Parts List Organizational, Intermediate, and Depot Upgunned Weapons Station (UGWS) Assault Amphibious Vehicle, Personnel, Model 7A1, AAVP7A1

2141-MAIN-2105: Repair water jet propulsion unit

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Disassemble components.
2. Inspect components.
3. Repair components.
4. Assemble components.
5. QC components.

REFERENCES:
1. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1

2141-MAIN-2106: Repair crew vent fan

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Test components.
2. Disassemble components.
3. Inspect components.
4. Repair components.
5. Assemble components.
6. QC components.

REFERENCES:
1. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1

2141-MAIN-2107: Repair radiator

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Disassemble components.
2. Inspect components.
3. Repair components.
4. Assemble components.
5. QC components.

REFERENCES:
1. TM 8F152B-25&P/4 Power Plant Assembly, AAV/FOV & RAM/RS

2141-MAIN-2108: Repair AAV/FOV MK154 launcher

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Diagnose electrical system failures.
2. Diagnose hydraulic system failures.
3. Perform electrical system corrective maintenance repairs.
4. Perform hydraulic system corrective maintenance repairs.
5. Conduct a function check.

REFERENCES:
1. TM 09674A-10/3 Amphibious Assault Vehicle, Personnel Operators' Manual

---

2141-SCTY-2201: Administer physical security measures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

BILLETS: Maintenance Chief

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure proper security procedures are adhered to.

PERFORMANCE STEPS:
1. Inspect lock and key control procedures.
2. Inspect Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Inspect storage facilities.
4. Determine security barriers employment.
5. Determine security lighting employment.
6. Maintain Physical Security records.
7. Manage access control.

REFERENCES:
1. MCO 5530.14 Marine Corps Physical Security Program Manual

2141-VOPS-2301: Supervise a maintenance vehicle section

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure safe operation without loss of vehicle control at any time.

PERFORMANCE STEPS:
1. Validate before, during and after operation checks and services.
2. Reconcile logbook entries.
3. Reconcile organic equipment inventories.
4. Execute mission.

REFERENCES:
1. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
2. MCO 4790.18B Corrosion Prevention and Control (CPAC) Program
3. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order (May 06)
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
6. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2141-VREC-2401: Recover submerged AAV/FOV

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2141

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: In order to salvage ground assets.

PERFORMANCE STEPS:
1. Review mission analysis.
2. Plan mission.
3. Execute mission.
4. Report results.

REFERENCES:
1. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1

GROUND ORD MAINT T&R MANUAL

CHAPTER 12

MOS 2146 INDIVIDUAL EVENTS

CHAPTER 12

MOS 2146 INDIVIDUAL EVENTS

12000. PURPOSE. This chapter details the individual events that pertain to the 2146 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

12001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2146-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 1000 and 2000-level events.

12002. INDEX OF INDIVIDUAL EVENTS

12003. 1000-LEVEL EVENTS

2146-ADMN-1001: Utilize Automated Information Systems (AIS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to accurately reflect condition of the equipment.

PERFORMANCE STEPS:
1. Determine appropriate publication(s).
2. Determine appropriate forms and/or records.
3. Input required data.
4. Submit forms and/or records.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 4700-15/1_ Ground Equipment Record Procedures
3. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2146-MAIN-1101: Maintain tools and test equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure accountability and serviceability.

PERFORMANCE STEPS:
1. Perform user maintenance for common tools.
2. Perform user maintenance for special tools.
3. Perform user maintenance for TMDE.
4. Perform user maintenance for M1A1 tools.
5. Perform user maintenance for M88A2 tools.
6. Perform user maintenance for AVLB tools.
7. Inventory kits, sets, chests, and equipment, and complete forms and records.
8. Complete maintenance and/or administrative records and procedures.

REFERENCES:
1. FM 5-499 HYDRAULICS
2. LI 08953A-13 TANK, COMBAT, FULL-TRACKED, 120-MM GUN, M1A1
3. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. TC 9-60 COMMUNICATIONS-ELECTRONICS FUNDAMENTALS
6. TI 08953A-14/9 INSPECTION AND EVACUATION CRITERIA FOR TANK M1A1
7. TM 08953A-20/2-1 TANK M1A1 (120MM GUN) HULL
8. TM 08953A-20/2-2 TANK M1A1 (120MM GUN) HULL
9. TM 08953A-34/5-1 TANK M1A1 (120MM GUN) HULL
10. TM 08953A-34/7-1 TANK M1A1 (120MM GUN)
11. TM 08953A-34P/8 TANK M1A1 (120MM GUN)
12. TM 10262A-14&P/1 Tank M1A1 (120MM GUN)
13. TM 10262A-14/2 Tank M1A1 (120MM GUN)
14. TM 4700-15/1_ Ground Equipment Record Procedures
15. TM 9-2350-200-BD-1 BATTLE DAMAGE ASSESSMENT AND REPAIR FOR M1A1 TURRET
16. TM 9-2835-255-34P Turbine Eng FS M1/IMP1 & M1A1
17. TM 9-4931-586-12-1&P TEST SET, ELECTRONIC AN/USM 615 (DSETS-M1/FVS)
18. TM 9-4931-586-12-2&P TEST SET, ELECTRONIC AN/USM 615 (DSETS-M1/FVS)
19. TM 9-8000 PRINCIPLES OF AUTOMOTIVE VEHICLES

2146-MAIN-1102: Maintain M1A1 hull

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to maintain the following M1A1 components: Powerpack, air induction system, fuel system, cooling system, electrical system, track, suspension, vehicular (personnel) heater, smoke generator components, driver periscope wiper, hydraulic system, fire suppression system, and NBC system.

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to sustain the mean time between failure rate.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. TM 9-2350-264-10-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 1 OF 2
2. TM 9-2350-264-10-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 2 OF 2

2146-MAIN-1103: Maintain M1A1 turret

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to maintain the following M1A1 turret components: Electrical system, turret exterior storage boxes, turret ammunition doors, safety guards and pads, turret ammunition racks, turret blow off panels, NBC pressure relief guard and cover, turret bustle ammunition compartment, turret interior stowage boxes, hydraulic system, armament system, fire control system, NBC system, thermal systems, embedded diagnostic systems, and external auxiliary power unit (EAPU).

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. FCS STM VER 2.0 M1A1 FIRE CONTROL SYSTEM OPERATION
2. LI 08953A-13 TANK, COMBAT, FULL-TRACKED, 120-MM GUN, M1A1
3. TC 9-60 COMMUNICATIONS-ELECTRONICS FUNDAMENTALS
4. TI 08953A-14/9 INSPECTION AND EVACUATION CRITERIA FOR TANK M1A1
5. TM 08953A-20/2-1 TANK M1A1 (120MM GUN) HULL
6. TM 08953A-20/2-2 TANK M1A1 (120MM GUN) HULL
7. TM 08953A-34/5-1 TANK M1A1 (120MM GUN) HULL
8. TM 08953A-34/7-1 TANK M1A1 (120MM GUN)
9. TM 08953A-34P/8 TANK M1A1 (120MM GUN)
10. TM 09849A-24&P EAPU MAINTENANCE MANUAL
11. TM 10262A-14&P/1 Tank M1A1 (120MM GUN)
12. TM 10262A-14/2 Tank M1A1 (120MM GUN)
13. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
14. TM 9-2350-200-BD-1 BATTLE DAMAGE ASSESSMENT AND REPAIR FOR M1A1 TURRET

15. TM 9-2350-264-10-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 1 OF 2
16. TM 9-2350-264-10-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 2 OF 2
17. TM 9-4931-586-12-1&P TEST SET, ELECTRONIC AN/USM 615 (DSETS-M1/FVS)
18. TM 9-4931-586-12-2&P TEST SET, ELECTRONIC AN/USM 615 (DSETS-M1/FVS)
19. TM 9-8000 PRINCIPLES OF AUTOMOTIVE VEHICLES

2146-MAIN-1104: Maintain M88A2

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to maintain the following M88A2 components: Electrical systems, engine, and transmission, suspension, fire suppression, and hydraulic system, gas particulate filter unit, output reduction unit, final drive, and recovery components.

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to sustain the mean time between failure rate.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. FM 5-499 HYDRAULICS
2. LO 9-2350-256-12 Recovery Vehicle, Full Tracked, Medium
3. TM 9-2350-292-10 Operator's Manual for Recovery Vehicle, Full Tracked, Heavy
4. TM 9-2350-292-20-1 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
5. TM 9-2350-292-20-2 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
6. TM 9-2350-292-34 DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
7. TM 9-8000 PRINCIPLES OF AUTOMOTIVE VEHICLES

2146-MAIN-1105: Maintain AVLB chassis/launcher

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to maintain the following AVLB components: Chassis, launcher, power plant, fuel system, electrical system, transmission, final drive, brake system, interior components, gauges, fire suppression system, hydraulic system, and bridge.

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to sustain the mean time between failure rate.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. TI 08953A-14/9 INSPECTION AND EVACUATION CRITERIA FOR TANK M1A1
2. TM 5-5420-202-10 Operator's Manual for M-60 AVLB
3. TM 5-5420-202-20-1 AVLB M60A1 Chasis Transporting
4. TM 5-5420-202-20-2 AVLB M60A1 Chasis Transporting
5. TM 5-5420-202-20-3 AVLB M60A1 Chasis Transporting
6. TM 5-5420-202-20-4 AVLB M60A1 Chasis Transporting
7. TM 5-5420-203-14 Operator's Manual for AVLB
8. TM 5-5420-228-24 Launcher hydraulic system, M60A1 Tank chassis

---

2146-VOPS-1201: Operate M1A1 tank

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: Without loss of vehicle control at any time.

PERFORMANCE STEPS:
1. Perform before, during and after operation checks and services.
2. Navigate vehicle.
3. Employ communications equipment.
4. Employ DVE.
5. Inspect, mount, stowage SL-3 and collateral equipment.
6. Maintain Vehicle Logbook.

REFERENCES:
1. TM 4700-15/1_ Ground Equipment Record Procedures
2. TM 9-2350-264-10-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 1 OF 2
3. TM 9-2350-264-10-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 2 OF 2

2146-VREC-1301: Operate M88A2

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: Without loss of vehicle control at any time.

PERFORMANCE STEPS:
1. Perform before, during and after operation checks and services.
2. Navigate vehicle.
3. Employ communications equipment.
4. Employ auxiliary power unit.
5. Employ DVE.
6. Perform recovery operations.
7. Perform towing operations.
8. Perform lifting operations.
9. Inspect, mount, stowage SL-3 and collateral equipment.
10. Maintain Vehicle Logbook.

REFERENCES:
1. FM 3-22.65 Browning Machinegun, Caliber .50, HB M2
2. FM 9-43-2 Recovery and Battlefield Damage Assesment and Repair
3. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
4. TM 4700-15/1_ Ground Equipment Record Procedures
5. TM 9-1005-213-10 Operator's Manual Machine Gun, Cal .50
6. TM 9-207 Operations and Maintenance of Ordnance Materiel in Extreme Cold Weather
7. TM 9-2350-292-10 Operator's Manual for Recovery Vehicle, Full Tracked, Heavy
8. TM 9-237 Welding Theory and Application

12004. 2000-LEVEL EVENTS

2146-ADMN-2001: Supervise maintenance management programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2146

BILLETS: Maintenance Chief

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure supportability of ordnance assets.

PERFORMANCE STEPS:
1. Determine requirements.
2. Maintain modification control program.
3. Maintain calibration control program.
4. Maintain new equipment warranty program.
5. Coordinate Contractor Logistics Support.
6. Submit product quality deficiency reports (PQDR).
7. Maintain publications library.
8. Maintain preventative maintenance programs.
9. Maintain corrective maintenance programs.
10. Coordinate embarkation of ground ordnance equipment.
11. Reconcile Automated Information System data.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
4. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
5. MCO 4105.2_ Marine Corps Warranty Program
6. MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property (Aug 94)
7. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
8. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP) (Jun 99)
9. MCO 4790.18B Corrosion Prevention and Control (CPAC) Program (Jul 04)
10. MCO 4855.10B Product Quality Deficiency Report (PQDR) (Jan 93)
11. MCO 5100.29A Marine Corps Safety Program (Jul 04)
12. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
13. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
14. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
15. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
16. MCO P5102.1B Navy & Marine Corps Mishap And Safety Investigation Reporting, and Record Keeping Manual (Jan 05)

17. MCO P5215.17C The Marine Corps Technical Publications System (Jun 96)
18. NAVMC 2761 Catalog of Publications (Oct 07)
19. TI 4710-14/1_ Replacement and Evacuation Criteria for USMC Equipment
20. TI 4733-15/1_ TMDE Calibration & Maintenance Program
21. TI 5600 Publication Information Marine Corps Equipment
22. TI-4733-15/1 Calibration Requirements
23. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
24. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
25. UM-PLMS Marine Corps Publications Library Management System (PLMS) Users Manual
26. Unit TO/E Table of Organization/Equipment

2146-ADMN-2002: Supervise maintenance area operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2146

BILLETS: Maintenance Chief

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure optimal mission supportability.

PERFORMANCE STEPS:
1. Establish a work flow plan.
2. Coordinate load testing.
3. Reconcile Automated Information System data.
4. Apply operational risk management (ORM).

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DLA Handbook DLA Handbook
3. MCBUL 3000 MARES Logistics Reportable Equipment
4. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
5. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
6. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
7. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
8. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
9. MCWP 4-11 Tactical-Level Logistics
10. UM 4400-124 Sassy Using Unit Procedures

2146-MAIN-2101: Maintain M1A1 mine clearing plow/dozer blade

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to maintain the M1A1 mine clearing plow/dozer blade.

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To ensure actions are completed to correct any deficiencies.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. TM 2590-10/1 Mine Clear Blde F/MI IPM1 M1A1
2. TM 2590-23&P/2 Mine Clear Blde F/MI IPM1 M1A1

2146-MAIN-2102: Repair M1A1 hull

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following M1A1 components: engine, transmission, air induction system, fuel system, cooling system, electrical system, track, suspension, smoke generator components, driver periscope wiper, hydraulic system, fire suppression system, brake system, steering system, and NBC system.

MOS PERFORMING: 2146

GRADES: LCPL, CPL, SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.

3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform intermediate maintenance, as required.
6. Perform Quality Control.

REFERENCES:
1. TM 9-2350-264-20-1-1 TANK, COMBAT, FULL-TRACKED,120-MM GUN, M1A1,HULL,VOLUME 1 OF 5
2. TM 9-2350-264-20-1-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 2 OF 5
3. TM 9-2350-264-20-1-3 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 3 OF 5
4. TM 9-2350-264-20-1-4 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 4 OF 5
5. TM 9-2350-264-20-1-5 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 5 OF 5
6. TM 9-2350-264-24P-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

2146-MAIN-2103: Repair M88A2

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following M88A2 components: Electrical systems, engine, and transmission, suspension, fire suppression, and hydraulic system, gas particulate filter unit, output reduction unit, final drive, and recovery components and recovery components.

MOS PERFORMING: 2146

GRADES: LCPL, CPL, SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. TM 9-2350-292-10 Operator's Manual for Recovery Vehicle, Full Tracked, Heavy
2. TM 9-2350-292-20-1 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
3. TM 9-2350-292-20-2 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY,

FULL-TRACKED: M88A2
4. TM 9-2350-292-34 DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2

2146-MAIN-2104: Repair AVLB chassis/launcher

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following AVLB components: launcher, engine, fuel system, electrical system, transmission, final drive, brake system, interior components, gauges, fire suppression system, hydraulic system, and bridge.

MOS PERFORMING: 2146

GRADES: LCPL, CPL, SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. TM 5-5420-202-10 Operator's Manual for M-60 AVLB
2. TM 5-5420-202-20-1 AVLB M60A1 Chasis Transporting
3. TM 5-5420-202-20-2 AVLB M60A1 Chasis Transporting
4. TM 5-5420-202-20-3 AVLB M60A1 Chasis Transporting
5. TM 5-5420-202-20-4 AVLB M60A1 Chasis Transporting
6. TM 5-5420-202-24P Bridge Armor Vehicle Launch
7. TM 5-5420-202-34 AVLB M60A1 Chasis Transporting
8. TM 5-5420-203-14 Operator's Manual for AVLB
9. TM 5-5420-228-24 Launcher hydraulic system, M60A1 Tank chassis

---

2146-MAIN-2105: Apply deep water fording kit to M88A2

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2146

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To adequately prepare for amphibious operations.

PERFORMANCE STEPS:
1. Conduct fording kit inventory.
2. Install fording kit.
3. Operate vehicle, per instructions.
4. Remove deep water fording kit.
5. Complete maintenance and/or administrative forms and records.

REFERENCES:
1. TM 9-2350-292-10 Operator's Manual for Recovery Vehicle, Full Tracked, Heavy

---

2146-MAIN-2106: Repair M1A1 turret

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following M1A1 turret components: Electrical system, turret ammunition doors, hydraulic system, armament system, fire control system, NBC system, thermal sights, embedded diagnostics, and external auxiliary power unit (EAPU).

MOS PERFORMING: 2146

GRADES: LCPL, CPL, SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. TM 08953A-34/7-1 TANK M1A1 (120MM GUN)
2. TM 08953A-34P/8 TANK M1A1 (120MM GUN)
3. TM 9-2350-264-10-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 1 OF 2
4. TM 9-2350-264-10-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 2 OF 2
5. TM 9-2350-264-20-2-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN,

M1A1,TURRET,VOLUME 1 OF 4
6. TM 9-2350-264-20-2-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,TURRET,VOLUME 2 OF 4
7. TM 9-2350-264-20-2-3 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,TURRET,VOLUME 3 OF 4
8. TM 9-2350-264-20-2-4 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,TURRET,VOLUME 4 OF 4
9. TM 9-2350-264-24-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,TURRET,SYSTEM SCHEMATICS
10. TM 9-2350-264-24P-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

2146-SCTY-2201: Administer physical security measures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2146

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure that only authorized personnel have access.

PERFORMANCE STEPS:
1. Inspect lock and key control procedures.
2. Inspect Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Inspect storage facilities.
4. Determine security barriers employment.
5. Determine security lighting employment.
6. Maintain Physical Security records.
7. Manage access control.

REFERENCES:
1. MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property (Aug 94)
2. MCO 5530.14 Marine Corps Physical Security Program Manual

GROUND ORD MAINT T&R MANUAL

CHAPTER 13

MOS 2147 INDIVIDUAL EVENTS

CHAPTER 13

MOS 2147 INDIVIDUAL EVENTS

13000. PURPOSE. This chapter details the individual events that pertain to the 2147 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

13001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2147-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 1000 and 2000-level events.

13002. INDEX OF INDIVIDUAL EVENTS

13003. 1000-LEVEL EVENTS

2147-ADMN-1001: Utilize Automated Information Systems (AIS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2147

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to accurately reflect condition of the equipment.

PERFORMANCE STEPS:
1. Determine appropriate publication(s).
2. Determine appropriate forms and/or records.
3. Input required data.
4. Submit forms and/or records.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2147-MAIN-1101: Maintain LAV tools and test equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2147

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure accountability and serviceability.

PERFORMANCE STEPS:
1. Perform user maintenance for common tools.
2. Perform user maintenance for special tools.
3. Perform user maintenance for TMDE.
4. Inventory kits, sets, chests, and equipment, and complete forms and records.
5. Complete maintenance and/or administrative records and procedures.

REFERENCES:
1. FM 9-243 Use and Care of Hand Tools and Measuring Tools
2. MCO P4790.2_ MIMMS Field Procedures Manual
3. SL-3 08721A Tool Kit, Armor LAV-25

4. SL-3 08723A Tool Set, F/242 25mm Cannon
5. SL-3 08895A Tool Kit, Intermediate Maintence, LAV
6. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2147-MAIN-1102: Maintain LAV/FOV hull

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to maintain the following LAV components: Suspension, engine, transmission, powerpack, steering, cooling system, fuel system, electrical system, pneumatic system, hydraulic system, brake system, AFSS, and drive train.

MOS PERFORMING: 2147

GRADES: PVT, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to sustain the mean time between failure rate.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Perform Quality Control.

REFERENCES:
1. SL-4 08594B Stock List, Repair Parts, LAV-25
2. TM 08594B-20/3B Light Armored Vehicle (LAV-25 Turret)
3. TM 08594B-20/4A Organizational Maintenance, LAV-25 Auto/Hull
4. TM 08594B-34/8 Light Armored Vehicle (LAV)
5. TM 08651A-20B Organizational Maintenance, LAV-Recovery
6. TM 08651B-20B Organizational Maintenance, LAV-Recovery
7. TM 08652A-10/1A Operator's Manual LAV-AT Turret
8. TM 08652A-20/3B Organizational Maintenance, LAV-Anti-Tank Turret
9. TM 08652B-10/1A Operator's Manual LAV-AT Turret
10. TM 08652B-10/2A LAV-AT
11. TM 08652B-20/3B Organizational Maintenance, LAV-Anti-Tank-Turret
12. TM 08652B-34 Intermediate Maintenance, LAV-AT
13. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
14. TM 8A192C-34/P1 6V53T Engine Repair Manual
15. TM 8A192C-34/PA TM 8A192C-34/PA

2147-VOPS-1201: Operate LAV/FOV

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2147

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an environment.

STANDARD: Without loss of vehicle control at any time.

PERFORMANCE STEPS:
1. Perform before, during and after operation checks and services
2. Navigate vehicle.
3. Employ communications equipment.
4. Employ DVE.
5. Inspect, mount, stowage SL-3 and collateral equipment.
6. Maintain Vehicle Logbook.

REFERENCES:
1. LI 08594B-12/2A Lubrication Instructions, Auto-Hull LAV-25
2. LI 08594C-12/1B Lubrication Instruction, LAV-25 Turret
3. SL-3-08594A Stock List, LAV-25
4. TM 08594A-10-1C Operator's Manual LAV-25 Turret
5. TM 08594B-10/2B Operator's Manual LAV-25 Hull
6. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures

---

2147-VREC-1301: Employ recovery vehicle

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2147

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to salvage ground ordnance assets.

PERFORMANCE STEPS:
1. Conduct before, during and after operation checks and services on equipment.
2. Survey recovery site.
3. Make recovery calculations.
4. Determine appropriate recovery equipment.
5. Retrieve disabled vehicle.

REFERENCES:
1. LI 08651B-12A Lubrication Instruction, LAV-Recovery
2. TM 08651B-10A Operator's Manual, LAV Recovery
3. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

13004. 2000-LEVEL EVENTS

2147-ADMN-2001: Supervise maintenance management programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2146

BILLETS: Maintenance Chief

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure supportability of ordnance assets.

PERFORMANCE STEPS:
1. Determine requirements.
2. Maintain modification control program.
3. Maintain calibration control program.
4. Maintain new equipment warranty program.
5. Coordinate Contractor Logistics Support.
6. Submit product quality deficiency reports (PQDR).
7. Maintain publications library.
8. Maintain preventative maintenance programs.
9. Maintain corrective maintenance programs.
10. Coordinate embarkation of ground ordnance equipment.
11. Reconcile Automated Information System data.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
4. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
5. MCO 4105.2_ Marine Corps Warranty Program
6. MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property (Aug 94)
7. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
8. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP) (Jun 99)
9. MCO 4790.18B Corrosion Prevention and Control (CPAC) Program (Jul 04)
10. MCO 4855.10B Product Quality Deficiency Report (PQDR) (Jan 93)
11. MCO 5100.29A Marine Corps Safety Program (Jul 04)
12. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
13. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
14. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
15. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
16. MCO P5102.1B Navy & Marine Corps Mishap And Safety Investigation Reporting, and Record Keeping Manual (Jan 05)

17. MCO P5215.17C The Marine Corps Technical Publications System (Jun 96)
18. NAVMC 2761 Catalog of Publications (Oct 07)
19. TI 4710-14/1_ Replacement and Evacuation Criteria for USMC Equipment
20. TI 4733-15/1_ TMDE Calibration & Maintenance Program
21. TI 5600 Publication Information Marine Corps Equipment
22. TI-4733-15/1 Calibration Requirements
23. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
24. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
25. UM-PLMS Marine Corps Publications Library Management System (PLMS) Users Manual
26. Unit TO/E Table of Organization/Equipment

2147-ADMN-2002: Supervise maintenance area operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2146

BILLETS: Maintenance Chief

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure optimal mission supportability.

PERFORMANCE STEPS:
1. Establish a work flow plan.
2. Coordinate load testing.
3. Reconcile Automated Information System data.
4. Apply operational risk management (ORM).

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DLA Handbook DLA Handbook
3. MCBUL 3000 MARES Logistics Reportable Equipment
4. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
5. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
6. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
7. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
8. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
9. MCWP 4-11 Tactical-Level Logistics
10. UM 4400-124 Sassy Using Unit Procedures

2147-MAIN-2101: Repair LAV/FOV hull

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following LAV components: Suspension, engine, transmission, power pack, steering, cooling system, fuel system, electrical system, pneumatic system, hydraulic system, brake system, AFSS, and drive train.

MOS PERFORMING: 2147

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Troubleshoot failed component.
2. Conduct failure analysis.
3. Disassemble failed component.
4. Retrofit failed component.
5. Perform Quality Control procedures.

REFERENCES:
1. SL-4 08594B Stock List, Repair Parts, LAV-25
2. SL-4 08651B Stock List, Repair Parts, LAV-Recovery
3. SL-4 08652B Stock List, Repair Parts, LAV-Anti-Tank
4. TM 08594B-20/4A Organizational Maintenance, LAV-25 Auto/Hull
5. TM 08594B-34/8 Light Armored Vehicle (LAV)
6. TM 08651B-20B Organizational Maintenance, LAV-Recovery
7. TM 08651B-34 Intermediate Maintenance, LAV-Recovery
8. TM 08652B-34 Intermediate Maintenance, LAV-AT
9. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
10. TM 8A191B-34/1 Intermediate Maintenance, Transmission Automatic
11. TM 8A192C-34/P1 6V53T Engine Repair Manual

2147-MAIN-2102: Repair LAV-Recovery

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following LAV-Recovery components: Electrical system, hydraulic system, crane, generator, PTO, and winch.

MOS PERFORMING: 2147

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Troubleshoot failed component.
2. Conduct failure analysis.
3. Disassemble failed component.
4. Retrofit failed component.
5. Perform Quality Control procedures.

REFERENCES:
1. SL-4 08651A Stock List, Repair Parts, LAV-Recovery
2. TM 08651A-20B Organizational Maintenance, LAV-Recovery
3. TM 08651B-20B Organizational Maintenance, LAV-Recovery
4. TM 08651B-34 Intermediate Maintenance, LAV-Recovery
5. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2147-MAIN-2103: Repair LAV-AT turret

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following LAV-AT turret components: Hydraulic system, electrical system, mechanical linkages, and image transfer assembly.

MOS PERFORMING: 2147

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. SL-4 08652B Stock List, Repair Parts, LAV-Anti-Tank
2. TM 08652A-10/1A Operator's Manual LAV-AT Turret
3. TM 08652A-20/3B Organizational Maintenance, LAV-Anti-Tank Turret
4. TM 08652B-10/1A Operator's Manual LAV-AT Turret
5. TM 08652B-10/2A LAV-AT
6. TM 08652B-34 Intermediate Maintenance, LAV-AT
7. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2147-MAIN-2104: Repair LAV-25 turret

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair the following LAV-25 turret components: Electrical system, armament system, and fire control system.

MOS PERFORMING: 2147

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Troubleshoot systems.
5. Perform organizational maintenance, as required.
6. Perform intermediate maintenance, as required.
7. Perform Quality Control.

REFERENCES:
1. LI 08594C-12/1B Lubrication Instruction, LAV-25 Turret
2. SL-4 08594B Stock List, Repair Parts, LAV-25
3. TM 08594B-10-1C Operator's Manual, LAV-25 Turret
4. TM 08594B-10/2B Operator's Manual LAV-25 Hull
5. TM 08594B-20/3B Light Armored Vehicle (LAV-25 Turret)
6. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
7. TM 9-1000-202-14 Cannon Tube Evaluation

2147-SCTY-2201: Administer physical security measures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2147

BILLETS: Maintenance Chief

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure proper security procedures are adhered to.

PERFORMANCE STEPS:
1. Inspect lock and key control procedures.

2. Inspect Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Inspect storage facilities.
4. Determine security barriers employment.
5. Determine security lighting employment.
6. Maintain Physical Security records.
7. Manage access control.

REFERENCES:

1. MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property (Aug 94)
2. MCO 5530.14 Marine Corps Physical Security Program Manual

GROUND ORD MAINT T&R MANUAL

CHAPTER 14

MOS 2149 INDIVIDUAL EVENTS

CHAPTER 14

MOS 2149 INDIVIDUAL EVENTS

14000. PURPOSE. This chapter details the individual events that pertain to the 2149 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

14001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2149-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 2000-level events.

14002. INDEX OF INDIVIDUAL EVENTS

14003. 2000-LEVEL EVENTS

2149-ADMN-2001: Coordinate maintenance programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: The individual is responsible for orchestrating the following programs: WIR, IROAN, JOAP, DEMIL, UUNS/UNS, ERDT, CPAC, Contract Logistics Support (CLS), RCM, PQDR, ELMP, Total Life Cycle Management, and Warranty Program.

MOS PERFORMING: 2149

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure long-term supportability of ground ordnance equipment.

PERFORMANCE STEPS:
1. Identify mission requirements.
2. Analyze capabilities.
3. Determine resource requirements.
4. Analyze external requirements.
5. Develop procedures to comply with functional areas of maintenance management.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
4. MCO 4105.2_ Marine Corps Warranty Program
5. MCO 4710.8 Uniform Criteria for Repair Cost Estimated Used to Determine
6. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP) (Jun 99)
7. MCO 4790.18B Corrosion Prevention and Control (CPAC) Program (Jul 04)
8. MCO 4855.10B Product Quality Deficiency Report (PQDR) (Jan 93)
9. MCO 5215.1K Marine Corps Directives Management Program
10. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
11. MCO P4400.150E Consumer-Level Supply Policy Manual (Jun 99)
12. MCO P4400.82F Regulated/Controlled Item Management Manual (Feb 85)
13. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures
14. Unit TO/E Table of Organization/Equipment

2149-ADMN-2002: Manage ground ordnance maintenance resources

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: The individual is responsible for managing the following: Embarkation, load certification programs, licensing program, environmental programs, safety programs, and MOS training.

MOS PERFORMING: 2149

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure resources are sufficient to maintain ground ordnance equipment.

PERFORMANCE STEPS:
1. Develop maintenance flow plan
2. Identify equipment.
3. Identify facilities requirement.
4. Maintain facilities.
5. Analyze time management.
6. Analyze budget.
7. Implement tactical logistics.
8. Conduct site surveys, when applicable.
9. Analyze mobilization plan.
10. Employ personnel.
11. Advise Maintenance Officer/MMO.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. DOD DIR 4160.21 Defense Disposal Manual
4. MCBUL 3000 MARES Logistics Reportable Equipment
5. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
6. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
7. MCO P4400.150_ Consumer Level Supply Policy Manual
8. MCO P4400.82F Regulated/Controlled Item Management Manual (Feb 85)
9. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
10. MCWP 4-11 Tactical-Level Logistics

2149-ADMN-2003: Manage maintenance operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2149

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure long-term supportability of ground ordnance equipment.

PERFORMANCE STEPS:
1. Determine program requirement(s).
2. Implement corrective actions, if required.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. MCO 1553.3A Unit Training Management (UTM) (Jan 04)
3. MCO 5100.29A Marine Corps Safety Program (Jul 04)
4. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order (May 06)
5. MCO 5104.1C Navy Laser Hazards Control Program
6. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
7. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
8. MCO P4450.12 Storage and Handling of Hazardous Materials
9. MCO P5102.1B Navy & Marine Corps Mishap And Safety Investigation Reporting, and Record Keeping Manual (Jan 05)
10. MCRP 3-0A Unit Training Management Guide
11. NAVMC 2692 Unit Safety Program Management Manual
12. NAVMC 3500.33 Ground Ordnance Maintenance T&R Manual
13. NAVMC DIR 5100.8 Marine Corps Occupational Safety and Health (OSH) Program Manual (May 06)

2149-ADMN-2004: Analyze physical security procedures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2149

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING:

CONDITION: Given a requirement.

STANDARD: To ensure procedures are adhered to.

PERFORMANCE STEPS:
1. Validate lock and key control procedures.
2. Validate Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Validate storage facilities.
4. Review security barriers employment.
5. Review security lighting employment.
6. Maintain Physical Security records.
7. Manage access control.

REFERENCES:
1. DOD 4160.21-M-1 Defense Demilitarization Manual
2. MCO 4030.16 Marine Corps Packing and Packing Maintenance of Small Arms

3. MCO 4610.15 Shipment of Military Equipment, Explosives and other Dangerous Articles
4. MCO 5530.14 Marine Corps Physical Security Program Manual
5. MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems

---

2149-ADMN-2005: Provide guidance on recovery operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2149

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure the recovery of equipment is safely accomplished.

PERFORMANCE STEPS:
1. Determine recovery requirements.
2. Determine Battle Damage Assessment and Repair (BDAR), if applicable.
3. Analyze recovery ORM.
4. Coordinate recovery operations.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. FM 9-43-2 Recovery and Battlefield Damage Assessment and Repair
4. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
5. MCWP 4-11 Tactical-Level Logistics

GROUND ORD MAINT T&R MANUAL T&R MANUAL

CHAPTER 15

MOS 2161 INDIVIDUAL EVENTS

CHAPTER 15

MOS 2161 INDIVIDUAL EVENTS

15000. PURPOSE. This chapter details the individual events that pertain to the 2161 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

15001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2161-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 1000 and 2000-level events.

15002. INDEX OF INDIVIDUAL EVENTS

15003. 1000-LEVEL EVENTS

2161-ADMN-1001: Utilize Automated Information Systems (AIS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2161

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to accurately reflect condition of the equipment.

PERFORMANCE STEPS:
1. Determine appropriate publication(s).
2. Determine appropriate forms and/or records.
3. Input required data.
4. Submit forms and/or records.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2161-MACH-1101: Perform shop operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2161

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to maintain a safe and operable work area.

PERFORMANCE STEPS:
1. Maintain tools and equipment.
2. Observe safety regulations.
3. Observe hazardous material regulations.

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. DOD INST 6050.5 DOD Hazard Communication Program
3. FM 9-243 Use and Care of Hand Tools and Measuring Tools
4. MCO P5090.2A Environmental Compliance and Protection Manual (Jul 98)
5. TM 10209-10/1 Use and Care of Hand Tools and Measuring Tools

---

2161-MACH-1102: Perform Machinist Operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to fabricate work piece utilizing a band saw, drill press, lathe, vertical mill with digital read out (DRO), and hardness tester.

MOS PERFORMING: 2161

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure work piece is in accordance with required tolerances.

PERFORMANCE STEPS:
1. Analyze shop drawing(s).
2. Determine appropriate tools/equipment.
3. Fabricate work piece.
4. Perform quality control.
5. Conduct Preventive Maintenance Checks and Services (PMCS).
6. Complete maintenance and/or administrative forms and records.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. OPNAV 4790.2 Naval Aviation Maintenance Program
3. Operator's Manual Operator's Manual
4. TC 9-524 Fundamentals of Machine Tools
5. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2161-MACH-1103: Prepare Cutting Tools

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to use a bench grinder to form cutting tools.

MOS PERFORMING: 2161

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure precise shape and usability.

PERFORMANCE STEPS:
1. Analyze tool utilization.
2. Grind tools to specification.

3. Perform quality control.
4. Conduct Preventive Maintenance Checks and Services (PMCS).

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. Operator's Manual Operator's Manual
3. TC 9-524 Fundamentals of Machine Tools

2161-MACH-1104: Perform Thread Repair

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to repair threaded holes by extracting broken bolts, taps, drill bits, and threaded inserts.

MOS PERFORMING: 2161

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore equipment to a serviceable condition.

PERFORMANCE STEPS:
1. Determine appropriate tool(s).
2. Extract broken component.
3. Recondition thread.
4. Perform quality control.
5. Complete maintenance and/or administrative forms and records.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. OPNAV 4790.2 Naval Aviation Maintenance Program
3. Operator's Manual Operator's Manual
4. TC 9-524 Fundamentals of Machine Tools
5. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2161-MACH-1105: Operate Shop Equipment Machine Shop (SEMS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to set up and operate the SEMMS.

MOS PERFORMING: 2161

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure SEMS is setup and operational within a time limit of 45 minutes.

PERFORMANCE STEPS:
1. Determine area of operation.
2. Set up shelters.
3. Set up equipment.
4. Conduct a operations check.
5. Retrograde shelters/equipment, when applicable.
6. Conduct Preventive Maintenance Checks and Services (PMCS).
7. Complete maintenance and/or administrative forms and records.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. OPNAV 4790.2 Naval Aviation Maintenance Program
3. Operator's Manual Operator's Manual
4. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

15004. 2000-LEVEL EVENTS

2161-MACH-2101: Perform heat treating operation

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is required to temper the material to the required tensile strength.

MOS PERFORMING: 2161

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To modify material(s) to meet drawing specifications.

PERFORMANCE STEPS:
1. Analyze type of metal.
2. Utilize heating procedures.
3. Verify hardness.
4. Perform Preventive Maintenance Checks and Services (PMCS).
5. Complete maintenance and/or administrative forms and records.

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. OPNAV 4790.2 Naval Aviation Maintenance Program
3. Operator's Manual Operator's Manual
4. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2161-MACH-2102: Operate electro-disintegrating machine (EDM)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2161

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To remove broken extractors, taps, and drill bits from the work piece.

PERFORMANCE STEPS:
1. Remove unserviceable items.
2. Perform preventive maintenance checks on the machine.
3. Complete maintenance and/or administrative forms and records.

REFERENCES:
1. OPNAV 4790.2 Naval Aviation Maintenance Program
2. Operator's Manual Operator's Manual
3. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2161-MACH-2103: Operate surface grinder

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2161

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a work piece.

STANDARD: To ensure item adheres to required shop drawing specification.

PERFORMANCE STEPS:
1. Remove excess material.
2. Perform preventive maintenance checks on the machine.
3. Perform Quality Control.
4. Complete maintenance and/or administrative forms and records.

REFERENCES:
1. OPNAV 4790.2 Naval Aviation Maintenance Program
2. Operator's Manual Operator's Manual
3. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures

---

2161-MACH-2104: Conduct Advanced CNC Operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2161

GRADES: CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure machine is properly programmed.

PERFORMANCE STEPS:
1. Analyze shop drawing.
2. Design work piece.
3. Utilize the computer aided machining program.
4. Fabricate work piece.
5. Perform quality control.
6. Conduct Preventive Maintenance Checks and Services (PMCS).

REFERENCES:
1. Machinist Handbook Machinist Handbook
2. Operator's Manual Operator's Manual
3. TC 9-524 Fundamentals of Machine Tools

2161-OPS-2201: Supervise maintenance management programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2161

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure supportability of ordnance assets.

PERFORMANCE STEPS:
1. Determine requirements.
2. Maintain modification control program.
3. Maintain calibration control program.
4. Maintain new equipment warranty program.
5. Maintain ground ordnance equipment records and forms.
6. Coordinate repair and return (R&R) program.
7. Coordinate Contractor Logistics Support.
8. Submit product quality deficiency reports (PQDR).
9. Maintain publications library.
10. Maintain preventative maintenance programs.
11. Maintain corrective maintenance programs.
12. Maintain corrosion prevention and control (CPAC).
13. Coordinate embarkation of ground ordnance equipment.
14. Execute weapons exchange program.
15. Reconcile Automated Information System data.

REFERENCES:
1. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
2. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
3. MCO 4105.2_ Marine Corps Warranty Program
4. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP) (Jun 99)
5. MCO 4790.18B Corrosion Prevention and Control (CPAC) Program (Jul 04)
6. MCO 4855.10B Product Quality Deficiency Report (PQDR) (Jan 93)
7. MCO 5104.3A Marine Corps Radiation Safety Program (Jun 03)
8. MCO 5215.1K Marine Corps Directives Management Program
9. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
10. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
11. MCO P5090.2A Environmental Compliance and Protection Manual (Jul 98)
12. MCO P5102.1B Navy & Marine Corps Mishap And Safety Investigation Reporting, and Record Keeping Manual (Jan 05)
13. MCO P5215.17C The Marine Corps Technical Publications System (Jun 96)

14. TI 4733-15/11_ Infantry Weapons Gauge Calibration Exchange Program
15. TI 4733-15/1_ TMDE Calibration & Maintenance Program
16. TI 5600 Publication Information Marine Corps Equipment
17. TI-4733-15/1 Calibration Requirements
18. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
19. UM 4400-124 Sassy Using Unit Procedures
20. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
21. UM-PLMS Marine Corps Publications Library Management System (PLMS) Users Manual

---

2161-OPS-2202: Supervise maintenance area operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2161

BILLETS: Maintenance Chief

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure optimal mission supportability.

PERFORMANCE STEPS:
1. Establish a work flow plan.
2. Coordinate load testing.
3. Reconcile Automated Information System data.
4. Apply operational risk management (ORM).

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
3. DLA Handbook DLA Handbook
4. MCBUL 3000 MARES Logistics Reportable Equipment
5. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
6. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
7. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
8. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)

GROUND ORD MAINT T&R MANUAL

CHAPTER 16

MOS 2171 INDIVIDUAL EVENTS

CHAPTER 16

MOS 2171 INDIVIDUAL EVENTS

16000. PURPOSE. This chapter details the individual events that pertain to the 2171 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

16001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2171-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 1000 and 2000-level events.

16002. INDEX OF INDIVIDUAL EVENTS

16003. 1000-LEVEL EVENTS

2171-ADMN-1001: Utilize Automated Information Systems (AIS)

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to accurately reflect condition of the equipment.

PERFORMANCE STEPS:
1. Determine appropriate publication(s).
2. Determine appropriate forms and/or records.
3. Input required data.
4. Submit forms and/or records.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. TM 4700-15/1_ Ground Equipment Record Procedures

2171-ADMN-1002: Follow shop safety procedures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: In order to maintain a safe and efficient work area for the accomplishment of maintenance assignments.

PERFORMANCE STEPS:
1. Adhere to safety requirements.
2. Adhere to LASER safety programs.
3. Adhere to radiation safety programs.
4. Adhere to hazardous material / waste programs.
5. Adhere to safety requirements for TMDE assets in shop environment.

REFERENCES:
1. 29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
2. FM 9-243 Use and Care of Hand Tools and Measuring Tools

3. MCO 5104.1C Navy Laser Hazards Control Program
4. TM 10209-10/1 Use and Care of Hand Tools and Measuring Tools
5. TM 9-254 General Maintenance Procedures for Fire Control Materiel

---

2171-ADMN-1003: Follow basic maintenance management programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To conduct maintenance effectively and efficiently.

PERFORMANCE STEPS:
1. Identify required publications and directives.
2. Adhere to modification instructions.
3. Adhere to calibration procedures.
4. Complete maintenance management forms needed to document work.

REFERENCES:
1. MCO P4790.2_ MIMMS Field Procedures Manual
2. MCO P5215.17_ Marine Corps Technical Publications System
3. NAVMC 2761 Catalog of Publications
4. SL-1-2 Index of Authorized Publication for Equipment Support
5. SL-1-3 Index of Authorized Publication for Equipment Support
6. TI 4733-15/1_ TMDE Calibration & Maintenance Program
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. UM 4400-124 SASSY Using Unit Procedures
9. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2171-ELEC-1101: Maintain electronics circuits

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 12 months

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To restore equipment to a serviceable condition.

PERFORMANCE STEPS:
1. Determine function of circuits.

2. Troubleshoot circuitry.
3. Determine appropriate tools.
4. Repair discrepancy, if applicable.
5. Conduct a functions check.
6. Maintain maintenance records and reports.

REFERENCES:
1. FM 11-60 Communications-Electronics Fundamentals: Basic Principles, Direct Current
2. FM 11-61 Communications-Electronics Fundamentals: Basic Principles, Alternating Current
3. FM 11-62 Communications-Electronics Fundamentals: Basic Principles, Solid State Power Supplies
4. FM 11-72 Communications - Electronics Fundamentals : Digital Computers
5. TM 9999-15/2 Electro-Static Discharge (ESD) Management

2171-MAIN-1201: Maintain Anti-Armor Systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: An anti-Armor system includes but is not limited to the M220A3, M41, and M98A1.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools/ TMDE and support equipment.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. TM 09397B-12/1 Operator and Organizational Maintenance Manual for Javelin
3. TM 9-1425-450-12 TOW Weapon System Guided Missile System
4. TM 9-1425-450-24P TOW II Weapon System
5. TM 9-1425-450-34-1 Direct Support and General Support Maintenance Manual for TOW 2 Weapon System
6. TM 9-1425-450-34-2 Theory of Operation and Schematic Diagrams for TOW 2 Weapon System
7. TM 9-1425-451-34 TOW 2 Weapon System

2171-MAIN-1202: Maintain Image Intensified Systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Image intensified systems includes but are not limited to the AN/PVS-17 series, AN/PVS-24, AN/PVS-27, and AN/TVS-5.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools/ TMDE and support equipment.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. TM 10271A-23&P/2 Night Vision Device (MNVD) AN/PVS-14
3. TM 11-5855-214-23&P Night Vision Sight, Crew Served Weapon AN/TVS-5

2171-MAIN-1203: Maintain Thermal Systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Thermal systems includes but are not limited to the AN/PAS-13 Series, AN/PAS-18, AN/PAS-22, AN/PAS-27, and the AN/UAS-12C.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools/ TMDE and support equipment.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.

5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

---

2171-MAIN-1204: Maintain Direct View Optical Systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Direct view optical includes but are not limited to the M49, SSDS, AN/PVQ-31 series, M240 Day Optic, and SSOT.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools/ TMDE and support equipment.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.
7. Identify the theory of optical assemblies/components.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. TM 9-258 Elementary Optics and Application to Fire Control Instruments
3. TM 9-6650-212-/2 Telescope, Observation, M49
4. TM 9-6650-212-34P Telescope, Observation, M49 W/E

2171-MAIN-1205: Maintain Fire Control Systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Fire Control Systems include but are not limited to the M1 Series Gunners Quadrant, M2 Infinity Collimator and the M2A2 Aiming Circle.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools/TMDE and support equipment.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

---

2171-MAIN-1206: Maintain Indirect Fire Control Systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Indirect Fire Control Systems includes but are not limited to the M777, HIMARS, M224E4.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools/TMDE and support equipment.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

---

2171-MAIN-1207: Maintain Ordnance Vehicle Fire Control Systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Ordnance vehicle fire control systems includes but are not limited to fire control systems of the M1A1 Abrams, and the Light Armored Vehicle (LAV) series fire control systems.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools/ TMDE and support equipment.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. SL-4 08652A Stocl List,Repair Parts, LAV-Anti-Tank
3. TM 08652A-10/1A Operator's Manual LAV-AT Turret
4. TM 08652A-20/3B Organizational Maintence, LAV-Anti-Tank Turret
5. TM 08652B-10/1A Operator's Manual LAV-AT Turret
6. TM 9-1425-450-12 TOW Weapon System Guided Missile System
7. TM 9999-15/1 Electro-Static Discharge (ESD) Awareness

2171-MAIN-1208: Maintain LASER Systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Laser systems includes but are not limited to the AN/PAS-25, AN/PEQ-14, AN/PEQ-15, AN/PEQ-16, AN/PEQ-18, and AN/PSQ-18.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure system is in an operational condition.

PERFORMANCE STEPS:
1. Determine required tools/TMDE and support equipment.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.

4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. MCO 5104.1C Navy Laser Hazards Control Program
3. MCO 5104.3A Marine Corps Radiation Safety Program (Jun 03)

2171-OPS-1301: Operate purge/charge equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Purge devices include but are not limited to E1255, TS-10, N2-GEN Series.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To eliminate and prevent moisture buildup.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

---

16004. 2000-LEVEL EVENTS

2171-MAIN-2001: Maintain Organic support equipment

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: The individual is responsible for maintaining the following support equipment but is not limited to: Anti Armor and Ordnance Vehicle; Thermal, Image intensified optics, and fire control systems.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To restore equipment to a serviceable condition.

PERFORMANCE STEPS:
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.
5. Perform intermediate maintenance, as required.
6. Utilize Automated Maintenance Information Systems.
7. Maintain maintenance records and reports.
8. Perform Quality Control procedures.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

---

2171-MAIN-2002: Repair Anti-Armor System Components

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Anti-armor systems components includes but is not limited to the M41 and M98A1.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Troubleshoot failed component.
2. Conduct failure analysis.
3. Disassemble failed component.
4. Retrofit failed component.
5. Perform Quality Control procedures.
6. Maintain maintenance records and reports.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

---

2171-MAIN-2003: Repair Artillery Fire Control System Components

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Artillery Fire Control System Components include components of M198, M777, HIMARS, and M224E4.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Troubleshoot failed component.
2. Conduct failure analysis.
3. Disassemble failed component.
4. Retrofit failed component.
5. Perform Quality Control procedures.
6. Maintain maintenance records and reports.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. TI 5104-15/1A PROC PUBN IDX RADL SAF AFFAIRS PRGM

2171-MAIN-2004: Repair Mortar Fire Control Systems

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Mortar Fire Control Systems include but are not limited to the M64, and M67.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Troubleshoot failed component.
2. Conduct failure analysis.
3. Disassemble failed component.
4. Retrofit failed component.
5. Perform Quality Control procedures.
6. Maintain maintenance records and reports.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

---

2171-MAIN-2005: Repair Ordnance Vehicle Fire Control System Components

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

DESCRIPTION: Ordnance vehicle fire control system components includes but is not limited to M1A1 Tank, Light Armored Vehicle series, and Amphibious Assault Vehicle fire control components.

MOS PERFORMING: 2171

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a requirement.

STANDARD: To restore to a serviceable condition.

PERFORMANCE STEPS:
1. Troubleshoot failed component.
2. Conduct failure analysis.
3. Disassemble failed component.
4. Retrofit failed component.
5. Perform Quality Control procedures.
6. Maintain maintenance records and reports.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

---

2171-OPS-2101: Supervise maintenance management programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2171

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure supportability of ordnance assets.

PERFORMANCE STEPS:
1. Determine requirements.
2. Maintain modification control program.
3. Maintain calibration control program.
4. Maintain new equipment warranty program.
5. Maintain ground ordnance equipment records and forms.
6. Coordinate repair and return (R&R) program.
7. Coordinate Contractor Logistics Support.
8. Submit product quality deficiency reports (PQDR).
9. Maintain publications library.
10. Maintain preventative maintenance programs.
11. Maintain corrective maintenance programs.
12. Maintain corrosion prevention and control (CPAC).
13. Coordinate embarkation of ground ordnance equipment.
14. Execute weapons exchange program.
15. Reconcile Automated Information System data.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
4. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
5. MCO 4105.2_ Marine Corps Warranty Program
6. MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property (Aug 94)
7. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
8. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP) (Jun 99)
9. MCO 4790.18B Corrosion Prevention and Control (CPAC) Program (Jul 04)
10. MCO 4855.10B Product Quality Deficiency Report (PQDR) (Jan 93)
11. MCO 5104.3A Marine Corps Radiation Safety Program (Jun 03)
12. MCO 5215.1K Marine Corps Directives Management Program
13. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
14. MCO P4400.82F Regulated/Controlled Item Management Manual (Feb 85)
15. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
16. MCO P4790.2_ MIMMS Field Procedures Manual
17. MCO P5102.1B Navy & Marine Corps Mishap And Safety Investigation Reporting, and Record Keeping Manual (Jan 05)

18. MCO P5215.17C The Marine Corps Technical Publications System (Jun 96)
19. MCO P5530.14 Marine Corps Physical Security Program Manual
20. TI 4733-15/11_ Infantry Weapons Gauge Calibration Exchange Program
21. TI 4733-15/1_ TMDE Calibration & Maintenance Program
22. TI 5600 Publication Information Marine Corps Equipment
23. TI-4733-15/1 Calibration Requirements
24. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
25. UM-PLMS Marine Corps Publications Library Management System (PLMS) Users Manual

---

2171-OPS-2102: Supervise maintenance area operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2171

BILLETS: Maintenance Chief

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given Table of Organization/Equipment.

STANDARD: To ensure optimal mission supportability.

PERFORMANCE STEPS:
1. Establish a work flow plan.
2. Coordinate load testing.
3. Reconcile Automated Information System data.
4. Apply operational risk management (ORM).

REFERENCES:
1. Applicable Electro Optical Equip material Fielding Plans (MFPS) Applicable Electro Optical Equip material Fielding Plans (MFPS)
2. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
3. DLA Handbook DLA Handbook
4. MCBUL 3000 MARES Logistics Reportable Equipment
5. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
6. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
7. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
8. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
9. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
10. UM 4400-124 Sassy Using Unit Procedures

2171-SCTY-2201: Perform physical security measures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2171

GRADES: SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure armory contents are properly maintained and accounted for.

PERFORMANCE STEPS:
1. Inspect lock and key control procedures.
2. Inspect Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Inspect storage facilities.
4. Identify security barriers requirement.
5. Identify security lighting requirement.
6. Utilize Physical Security records.
7. Maintain access control.

REFERENCES:
1. MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property (Aug 94)
2. MCO 5530.14 Marine Corps Physical Security Program Manual

GROUND ORD MAINT T&R MANUAL

CHAPTER 17

MOS 2181 INDIVIDUAL EVENTS

CHAPTER 17

MOS 2181 INDIVIDUAL EVENTS

17000. PURPOSE. This chapter details the individual events that pertain to the 2181 community. These events are linked to a service-level Mission Essential Tasks (MET). This linkage tailor's individual training for the selected MET. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

17001. ADMINISTRATIVE NOTES. Events in the T&R Manual are depicted with a 12-digit, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. In some cases, all 12 digits may not be used. This chapter utilizes the following methodology:

a. Field one. Each event starts with 21XX, indicating that the event is for a designated MOS within the Ground Ordnance community.

b. Field two. This field is alpha characters indicating a functional area. In this chapter, the functional areas are as follows:

Code	Description	Example
ADMN	Administration	2181-ADMN-XXXX

c. Field three. All individual events within T&R Manuals are either 1000-level for events taught at MOS-producing formal schools or 2000-level for events taught at advanced-level schools or MOJT. This chapter contains 2000-level events.

17002. INDEX OF INDIVIDUAL EVENTS

17003. 2000-LEVEL EVENTS

2181-ADMN-2001: Coordinate maintenance programs

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: The individual is responsible for orchestrating the following programs: WIR, IROAN, JOAP, DEMIL, UUNS/UNS, ERDT, CPAC, Contract Logistics Support (CLS), RCM, PQDR, ELMP, Total Life Cycle Management, and Warranty Program.

MOS PERFORMING: 2181

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure long-term supportability of ground ordnance equipment.

PERFORMANCE STEPS:
1. Identify mission requirements.
2. Analyze capabilities.
3. Determine resource requirements.
4. Analyze external requirements.
5. Develop procedures to comply with functional areas of maintenance management.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
4. MCO 4105.2_ Marine Corps Warranty Program
5. MCO 4710.8 Uniform Criteria for Repair Cost Estimated Used to Determine
6. MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP) (Jun 99)
7. MCO 4790.18B Corrosion Prevention and Control (CPAC) Program (Jul 04)
8. MCO 4855.10B Product Quality Deficiency Report (PQDR) (Jan 93)
9. MCO 5215.1K Marine Corps Directives Management Program
10. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
11. MCO P4400.150E Consumer-Level Supply Policy Manual (Jun 99)
12. MCO P4400.82F Regulated/Controlled Item Management Manual (Feb 85)
13. TM 4700-15/1 Marine Corps Ground Equipment Record Procedures
14. Unit TO/E Table of Organization/Equipment

2181-ADMN-2002: Manage ground ordnance maintenance resources

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

DESCRIPTION: The individual is responsible for managing the following: Embarkation, load certification programs, licensing program, environmental programs, safety programs, and MOS training.

MOS PERFORMING: 2181

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure resources are sufficient to maintain ground ordnance equipment.

PERFORMANCE STEPS:
1. Develop maintenance flow plan
2. Identify equipment.
3. Identify facilities requirement.
4. Maintain facilities.
5. Analyze time management.
6. Analyze budget.
7. Implement tactical logistics.
8. Conduct site surveys, when applicable.
9. Analyze mobilization plan.
10. Employ personnel.
11. Advise Maintenance Officer/MMO.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. DOD DIR 4160.21 Defense Disposal Manual
4. MCBUL 3000 MARES Logistics Reportable Equipment
5. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
6. MCO 4400.16G Uniform Materiel Movement and Issue Priority System (Jun 85)
7. MCO P4400.150_ Consumer Level Supply Policy Manual
8. MCO P4400.82F Regulated/Controlled Item Management Manual (Feb 85)
9. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
10. MCWP 4-11 Tactical-Level Logistics

2181-ADMN-2003: Manage maintenance operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2181

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure long-term supportability of ground ordnance equipment.

PERFORMANCE STEPS:
1. Determine program requirement(s).
2. Implement corrective actions, if required.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. MCO 1553.3A Unit Training Management (UTM) (Jan 04)
3. MCO 5100.29A Marine Corps Safety Program (Jul 04)
4. MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order (May 06)
5. MCO 5104.1C Navy Laser Hazards Control Program
6. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
7. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
8. MCO P4450.12 Storage and Handling of Hazardous Materials
9. MCO P5102.1B Navy & Marine Corps Mishap And Safety Investigation Reporting, and Record Keeping Manual (Jan 05)
10. MCRP 3-0A Unit Training Management Guide
11. NAVMC 2692 Unit Safety Program Management Manual
12. NAVMC 3500.33 Ground Ordnance Maintenance T&R Manual
13. NAVMC DIR 5100.8 Marine Corps Occupational Safety and Health (OSH) Program Manual (May 06)

2181-ADMN-2004: Manage physical security procedures

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL:** 24 months

MOS PERFORMING: 2181

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure procedures are adhered to.

PERFORMANCE STEPS:
1. Validate lock and key control procedures.
2. Validate Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Validate storage facilities.
4. Review security barriers employment.
5. Review security lighting employment.
6. Conduct AA&E screening, when applicable.
7. Maintain Physical Security records.
8. Manage access control.

REFERENCES:
1. MCO 4030.16 Marine Corps Packing and Packing Maintenance of Small Arms
2. MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR)

Government Property (Aug 94)
3. MCO 4610.15 Shipment of Military Equipment, Explosives and other Dangerous Articles
4. MCO 5500.6 Arming of Security and Law Enforcement (LE) Personnel and the Use of Force
5. MCO 5530.14 Marine Corps Physical Security Program Manual
6. MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems

---

2181-ADMN-2005: Provide guidance on recovery operations

EVALUATION-CODED: NO **SUSTAINMENT INTERVAL**: 24 months

MOS PERFORMING: 2181

GRADES: MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a requirement.

STANDARD: To ensure the recovery of equipment is safely accomplished.

PERFORMANCE STEPS:
1. Determine recovery requirements.
2. Determine Battle Damage Assessment and Repair (BDAR), if applicable.
3. Analyze recovery ORM.
4. Coordinate recovery operations.

REFERENCES:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. FM 9-43-2 Recovery and Battlefield Damage Assessment and Repair
4. MCO P4790.2C MIMMS Field Procedures Manual (Jul 94)
5. MCWP 4-11 Tactical-Level Logistics

GROUND ORD MAINT T&R MANUAL

APPENDIX A

REFERENCES

Department of Defense Instruction (DODINT)
DOD INST 6050.5 DOD Hazard Communication Program
DOD 4160.21-M-1 Defense Demilitarization Manual

Field Manual (FM)

FM 9-43-2	Recovery and Battlefield Damage Assessment and Repair
FMFRP 4-34	Recovery and Battlefield Damage Assessment and Repair
FM 9-243	Use and Care of Hand Tools and Measuring Tools
FM 3-22.65	Browning Machinegun, Caliber .50, HB M2
FM 9-43-2	Recovery and Battlefield Damage Assessment and Repair
FM 11-60	Communications-Electronics Fundamentals: Basic Principles, Direct Current
FM 11-61	Communications-Electronics Fundamentals: Basic Principles, Alternating Current
FM 11-62	Communications-Electronics Fundamentals: Basic Principles, Solid State Power Supplies
FM 11-72	Communications - Electronics Fundamentals: Digital Computers

Marine Corps Order (MCO)

MCO 1553.2_	Management for Marine Corps Formal Schools & Training Centers
MCO 1553.3_	Unit Training Management
MCO 1553.5_	Marine Corps Training and Education Evaluation
MCO 3501.9	Marine Corps Combat Readiness and Evaluation System
MCO 4000.57	Marine Corps Total Life Cycle Management (TLCM)
MCO 4105.2	Marine Corps Warranty Program
MCO 4340.1_	Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property
MCO 4400.16G	Uniform Material Movement and Issue Priority System
MCO 4710.8	Uniform Criteria for Repair cost Estimated Used
MCO 4733.1B	Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
MCO P4790.1	Marine Corps Integrated Maintenance Management System (MIMMS) Manual
MCO 4790.18B	Corrosion Prevention and Control (CPAC) Program
MCO 4855.10B	Product Quality Deficiency Report (PQDR)
MCO 5500.6	Arming of Security and Law Enforcement (LE) Personnel and the Use of Force
MCO 5100.29A	Marine Corps Safety Program
MCO 5104.1C	Navy Laser Hazards Control Program
MCO 5104.3	Marine Corps Radiation Safety Program
MCO 5100.8	Marine Corps Occupational Safety and Health (OSH) Policy Order
MCO 5215.1K	Marine Corps Directives Management Program
MCO 5530.14	Marine Corps Physical Security Program Manual
MCO 8010.1	Class V (W) SUP FMF CBT OP
MCO 8020.1	Handling, Transportation, Storage, Reclassification and Disposal of Class V (W) material
MCO 8025.1	Malfunction and Deficiency Reporting

MCO 8300.1	Marine Corps Serialized Control of Small Arms Systems
MCO 8400.6	Licensing Procedures for Ordnance Vehicles
MCO P11240.106	Garrison Mobile Equipment
MCO P11262.2	Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
MCO P4400/150_	Consumer Level Supply Policy Manual
MCO P4400.82_	Regulated/Controlled Item Management Manual
MCO P4450.12	Storage and Handling of Hazardous Materials
MCO P4790.1	Marine Corps Integrated Maintenance Management System (MIMMS) Manual
MCO P4790.2	MIMMS Field Procedures Manual
MCO P4855.4	Procurement Quality Assurance
MCO P5090.2A	Environmental Compliance and Protection Manual
MCO P5102.1B	Navy & Marine Corps Mishap and Safety Investigation Reporting, and Record Keeping Manual
MCO P5215.17C	Marine Corps Technical Publications System
MCO P5600.31G	Marine Corps Publications and Printing Regulations
MCO P7100.8K	Field Budget Guidance Manual
MCO P8020.10B	Marine Corps Ammunition Management and Explosives Safety Policy program

Marine Corps Documents Publications (MCDP)

MCDP 4	Logistics

Marine Corps Warfighting Publications (MCWPs)

MCWP 4-11	Tactical Level Logistics
MCWP 4-11.4	Commanders Guide to Maintenance

Marine Corps Bulletin (MCBul)

MCBUL 1200	Military Occupational Specialties Manual
MCBUL 3000	MARES Logistics Reportable Equipment

Navy Manual (NAVMC)

NAVMC 2664	Financial Guidebook for Commanders
NAVMC 2761	Catalog of Publications
NAVMCDIR 5100.8	Marine Corps Occupational Safety and Health (OSH) Program Manual

Technical Instruction (TI)

TI 4733-15/1_	TMDE Calibration & Maintenance Program
TI 4733-15/11_	Infantry Weapons Gauge Calibration Exchange Program
TI 8005-25/12	Maintenance Sub-Merged Ordnance Combat Vehicle
TI 8005-24/20	Pre-Fire Inspection Small Arms Weapon Ordnance Material
TI 8005-24/20E	Trigger Weight Measurements and Pre-fire inspection Small Arms Weapons, Ordnance Material
TI 4733-15/11_	Infantry Weapons Gauge Calibration Exchange Program
TI 4733-15/1_	TMDE Calibration & Maintenance Program
TI 5600	Publication Information Marine Corps Equipment
TI-4733-15/1	Calibration Requirements
TI 4710-14/1_	Replacement and Evacuation Criteria for USMC Equipment
TI 5104-15/1A	PROC PUBN IDX RADL SAF AFFAIRS PRGM

Technical Manual (TM)

TM 4700-15/1	Marine Corps Ground Equipment Record Procedures
TM 02498A-23&P	M2 Gun, Machine

TM 02648C-24A&P/2 7.62MM, M14, Designated Marksman Rifle (DMR) W/E
TM 05538C-23&P/2 RIFLE 5.56MM M16A2 W/E
TM 05539C-IN SNIPER RIFLE 7.62, M40A3 & M40A5 Organizational and Intermediate Maintenance Manual
TM 08671A-23&P/2A Machine Gun 5.56MM M249
TM 09629A-23&P/2A SASR, 50 CALIBER M82A1A
TM 1005A-23&P/2A Pistol Semiautomatic 9MM M9
TM 11473A-IN/2A 7.62MM, M14, Enhanced Marksman Rifle (EMR) W/E
TM 9-1005-313-23&P Machinegun 7.62mm M240 Series
TM 08521A-23&P/2A Machine Gun 40MM MK19 MOD 3
TM 0922A-20&P/2 81MM MORTAR M252
TM 1010-223-34&P MORTAR 60MM LIGHTWEIGHT
TM 9-1010-205024 W/CH 1-3 Launcher Grenade 40MM M79
TM 9-1010-221-24&P M203 Grenade Launcher
TM 9-1005-13&P/1 Machine Gun Mounts
TM 09795B-IN Pistol M45 CQBP .45 Caliber Pistol Organizational and Intermediate Maintenance Manual
TM 09795B-OR Pistol M45 CQBP .45 Caliber Pistol Operators Manual
TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
TM 05539C-OR SNIPER RIFLE 7.26, M40A3 & M40A5 Operators Manual
TM 09134A-12&P/1 AT-4 tracer trainer
TM 11250A-12&P/1 M72AS LAW TRAINER LAUNCHER
TM 9-243 Common Tools Manual
TM 10209-10/1 Use and Care of Hand Tools and Measuring Tools
TM 00526A-24&P/2 Pistol Caliber .45 MEU (SOC)
TM 9-1005-206-14P/4 Operator's Organizational Direct Support and General Support Maintenance Repair Parts and Special Tools Manual
TM 9-1005-211-35 M1911A1 Maintenance Manual
TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
TM 00999-23&P/1 Recoil Exercise for M198 155MM Howitzer
TM 10407A-10-1 (IETM) Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
TM 10407A-25&P/2 (IETM) Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
TM 9-1000-202-14 Cannon Tube Evaluation
TM 07267B-10/1_ Operator's Manual, AAVR7A1.
TM 07268B-10/1_ Operator's Manual, AAVC7A1.
TM 09674A-10/3_ Operator's Manual, AAV 7A1 FOV
TM 10004A-10/1_ UGWS AAV7A1.
TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1
TM 9-2540-205-24&P Organizational, Direct Support and General Support Maintenance
TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV
TM 8F152B-25&P/4 Power Plant Assembly, AAV/FOV & RAM/RS
TM 10004A-25&P/2C Maintenance Instructions and Repair Parts List Organizational, Intermediate, and Depot Upgunned Weapons Station (UGWS) Assault Amphibious Vehicle, Personnel, Model 7A1, AAVP7A1
TM 9-2350-264-10-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 1 OF 2
TM 9-2350-264-10-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 2 OF 2
TM 9-2350-292-10 Operator's Manual for Recovery Vehicle, Full Tracked, Heavy
TM 9-2350-292-20-1 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-

	TRACKED: M88A2
TM 9-2350-292-20-2	UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
TM 9-2350-292-34	DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
TM 5-5420-202-10	Operator's Manual for M-60 AVLB
TM 5-5420-202-20-1	AVLB M60A1 Chasis Transporting
TM 5-5420-202-20-2	AVLB M60A1 Chasis Transporting
TM 5-5420-202-20-3	AVLB M60A1 Chasis Transporting
TM 5-5420-202-20-4	AVLB M60A1 Chasis Transporting
TM 5-5420-203-14	Operator's Manual for AVLB
TM 5-5420-228-24	Launcher hydraulic system, M60A1 Tank chassis
TM 9-1005-213-10	Operator's Manual Machine Gun, Cal .50
TM 9-207	Operations and Maintenance of Ordnance Materiel in Extreme Cold Weather
TM 9-237	Welding Theory and Application
TM 2590-10/1	Mine Clear Blde F/MI IPM1 M1A1
TM 2590-23&P/2	Mine Clear Blde F/MI IPM1 M1A1
TM 9-2350-264-20-1-1	TANK, COMBAT, FULL-TRACKED,120-MM GUN, M1A1,HULL,VOLUME 1 OF 5
TM 9-2350-264-20-1-2	TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 2 OF 5
TM 9-2350-264-20-1-3	TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 3 OF 5
TM 9-2350-264-20-1-4	TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 4 OF 5
TM 9-2350-264-20-1-5	TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 5 OF 5
TM 9-2350-264-24P-1	TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
TM 9-2350-292-10	Operator's Manual for Recovery Vehicle, Full Tracked, Heavy
TM 9-2350-292-20-1	UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
TM 9-2350-292-20-2	UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
TM 9-2350-292-34	DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
TM 08594B-20/3B	Light Armored Vehicle (LAV-25 Turret)
TM 08594B-20/4A	Organizational Maintenance, LAV-25 Auto/Hull
TM 08594B-34/8	Light Armored Vehicle (LAV)
TM 08651A-20B	Organizational Maintenance, LAV-Recovery
TM 08651B-20B	Organizational Maintenance, LAV-Recovery
TM 08652A-10/1A	Operator's Manual LAV-AT Turret
TM 08652A-20/3B	Organizational Maintenance, LAV-Anti-Tank Turret
TM 08652B-10/1A	Operator's Manual LAV-AT Turret
TM 08652B-10/2A	LAV-AT
TM 08652B-20/3B	Organizational Maintenance, LAV-Anti-Tank-Turret
TM 08652B-34	Intermediate Maintenance, LAV-AT
TM 08651B-10A	Operator's Manual, LAV Recovery
TM 8A191B-34/1	Intermediate Maintenance, Transmission Automatic
TM 8A192C-34/P1	6V53T Engine Repair Manual
TM 9999-15/2	Electro-Static Discharge (ESD) Management
TM 9-4931-586-12-1&P	Test Set Elec AN/USM-615
TM 9-4931-586-12-2&P	Test Set Elec AN/USM-615

TM 9-4931-586-12-4&P	Test Set Elec AN/USM-615
TM 9-4931-586-30&P	Test Set Elect AN/USM-615
TM 02194A-CD	U Fixture Azimuth Testing
TM 9-254	General Maintenance Procedures for Fire Control Materiel
TM 11-5855-299-12&P	Test Set, Electronic Systems, TS-4348/UV
TM 09397B-12/1	Operator and Organizational Maintenance Manual for Javelin
TM 9-1425-450-12	TOW Weapon System Guided Missile System
TM 9-1425-450-24P	TOW II Weapon System
TM 9-1425-450-34-1	Direct Support and General Support Maintenance Manual for TOW 2 Weapon System
TM 9-1425-450-34-2	Theory of Operation and Schematic Diagrams for TOW 2 Weapon System
TM 9-1425-451-34	TOW 2 Weapon System
TM 9-4935-450-24P	TOW II Weapon System
TM 09500A-23&P/2	Night Vision Goggles AN/PVS-7B
TM 10271A-23&P/2	Night Vision Device (MNVD) AN/PVS-14
TM 11-5855-214-23&P	Night Vision Sight, Crew Served Weapon AN/TVS-5
TM 9-258	Elementary Optics and Application to Fire Control Instruments
TM 9-6650-212-/2	Telescope, Observation, M49
TM 9-6650-212-34P	Telescope, Observation, M49 W/E

User Manual (UM)

UM-PLMS	Marine Corps Publications Library Management System (PLMS) User Manual
UM 4400-15	Marine Corps User Manual (Organic Property Control)
UM 4400-124	Sassy Using Unit Procedures
UM 4790-5	MIMMS AIS, Field Maintenance Procedures

Miscellaneous

29 CFR 1910.1200	Occupational Safety and Health Standards, Hazard Communication
Applicable ULSS	Unit Logistics Support Summary
Applicable Equipment Technical Manuals	Applicable Equipment Technical Manuals
Current Budget	Current Fiscal Budget for Base/Post/Station
DLA Handbook	
EngDraw	Interpreting Engineering Drawings
EOM	Equipment Operators Manual
Local Policies/Procedures	
LI 08594B-12/2A	Lubrication Instructions, Auto-Hull LAV-25
LI 08594C-12/1B	Lubrication Instruction, LAV-25 Turret
LI 08651B-12A	Lubrication Instruction, LAV-Recovery
LO 9-2350-256-12	Recovery Vehicle, Full Tracked, Medium
MCLCAT	Marine Corps Logistics Chain Analysis Team Checklist
Machinist Handbook	
Material safety data sheets for hazardous materials	
Model 40x	Model 40x Field Service Manual
Model 41	Smith & Wesson Owner's Manual
National Match	M1911A1 Pistol Build Procedures
NAVFAC P-307	Management of Weight Handling Equipment
NAVSEATM-50420-AA-RAD-010	Operator's Manual
ORM 1-0	Operational Risk Management
OPNAV 4790.2	Naval Aviation Maintenance Program

PWRC Current Precision Pistol Build / Rebuild Procedures
PWSR Current Precision Weapons Repairer's Tool Box Inventory
PWS Instruction Manual for Equipment
Refinishing Procedures
SAT Manual Systems Approach to Training
SECNAVIST 5216.5_ Correspondence Manual
SC 518-95-CL-A07 SMALL ARMS REPAIRER TOOL KIT
SL-3-00607A TOOL KIT, SMALL ARMS REPAIRER
SL-1-2 Index of Authorized Publication for Equipment Support
SL-1-3 Index of Authorized Publication for Equipment Support
SL-3 08721A Tool Kit, Armor LAV-25
SL-3 08723A Tool Set,F/242 25mm Cannon
SL-3 08895A Tool Kit, Intermediate Maintence,LAV
SL-3-02220A Fixture Cross Leveling W/E
SL-4 08594B Stock List, Repair Parts, LAV-25
SL-4 08652A Stocl List,Repair Parts, LAV-Anti-Tank
TB MED 524 Control of Hazards to Health from Laser Radiation
TC 9-524 Fundamentals of Machine Tools
TSM Technical Shop Mathematics
Unit SOP Unit’s Standard Operating Procedure
Unit TO/E Table of Organization/Equipment